

THE CULTIVATOR:

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THE CULTIVATOR.

"TO IMPROVE THE SOIL AND THE MIND."

PREMIUMS OF THE N. Y. S. AG. SOCIETY.

We wish to call the attention of the agricultural public to the list of premiums on agriculture, horticulture, &c., published in the last and the present numbers of the Cultivator. It is believed to be far the most liberal and extensive of any list of premiums yet presented in the United States, and will secure, we cannot doubt, an active and spirited competition. The list, it will be seen on examination, embraces almost every subject of agricultural or horticultural excellence or utility, and the field of competition is open to all who choose to avail themselves of it. Cattle of all ages and breeds, working oxen, fat cattle,—horses and mares of all ages and kinds,—swine,—sheep, long woolled, middle woolled, and fine woolled,—farm implements of all kinds,—silk,—silk reels,—butter and cheese,—field crops,—maple sugar,—discretionary premiums, &c. &c. For the list of premiums on horticultural products see the present number of the Cultivator.

We would in particular invite the attention of chemists to the liberal premium of \$100, offered for the best popular treatise on agricultural chemistry. The subject is one of great importance; and though several most valuable works on the subject have appeared within a few years, so rapid has been the progress of this science as connected with agriculture, that much new light may reasonably be expected as the result of further investigation. We have the satisfaction, also, of knowing that we have in this country several gentlemen whose pursuits have led to much consideration of the chemical relations of vegetables, and have thus qualified them for the elucidation and investigation of the subject for which the premium is offered.

The liberal premiums offered on the several subjects,—of the rotation of crops best suited to the soils of this state; the general management of the farm; on the introduction of new agricultural products; and the management and application of manures; together with the intrinsic importance of the matters named, will, we hope, call out from the many practical farmers of the state, or the country, who are qualified to discuss these topics, essays of permanent utility to the agricultural community.

An error occurred in our last number in relation to the time when the essays for which prizes were offered should be forwarded to the society. It should have been "January 1, 1843," instead of "June 1, 1842," as it was printed.

The attention of all who propose becoming competitors for any of the premiums is particularly directed to the rules and regulations adopted, which may be found in the last number of the Cultivator, as a close adherence to them must be very desirable and necessary. It will be seen that the premium list is equal to about two thousand dollars; and it will be the endeavor of the Executive Committee to carry out fully the objects of the society, in encouraging and promoting the great interests of agriculture in every form, and in rendering the annual fairs and shows of the society worthy of the great state of New-York.

WORK FOR THE MONTH.

REPAIRING and putting in complete order every fence on the farm, and particularly road and division fences, is one of the first and most essential of spring labors. If it has not been done in March, don't neglect it in April. Good fences prevent eruptions of bile among neighbors, contribute much to the good appearance of the farm, prevent the destruction of crops, and check in the bud that disposition to live at large which exists in most animals. Our winter winds make sad work with our worn, unstaked fences; and too frequently the rails blown off, lie the whole year buried in grass or weeds, decaying thrice as fast as they would if occupying their proper places on the fence. Common rail fences are best secured by perpendicular stakes placed at the corners, and secured at the tops by caps. Stakes of durable materials so placed will keep a fence in its place for years.

It will prove injurious to a soil to plow it when so wet as to smooth over and render compact the surface moved by the implement, as it dries into a kind of unburnt brick, fatal to all hopes of a good crop until again pulverized by frost. Clay soils, and those undrained, are most apt to suffer from this cause, which locks up all manures, and renders the part consolidated impervious to all atmospheric agency. Loamy or sandy soils may be plowed without danger of being rendered compact; and there are a few soils so constituted, that though they may exhibit a smoothed surface on plowing, they become friable and fall to pieces as soon as wet after drying. Such soils belong to the class called marly. One improper plowing on compact clay soils, undrained, will render useless all cultivation for the season.

As a general rule, the farmer will find it to his advantage to put in his spring grains, such as wheat, barley, oats, &c., as early as the soil can be fitted for their reception. The grain from early sown crops, when properly put in, is always more valuable than from later ones; being better filled, heavier, and of a finer quality in other respects. It suffers less, also, from the injurious effects of our dry summers, by which the later sown is prematurely ripened.

The pea is one of the crops which should be put in as early as possible, particularly if intended to be followed by wheat. The ground for this crop should be in good condition, not too heavily manured, but such as would be suitable for a wheat crop. We have known fine crops of peas grown on land turned over in the fall neatly, harrowed smooth and fine in the spring without disturbing the soil, and sown with peas as early as the season would admit. This course left the ground very clean, and the peas and rotted turf form a very good preparation for wheat.

Manures may now be drawn upon the fields for the crops to which they should be given. These should be corn, potatoes, and other roots, all of which will bear high manuring; while if the manure is applied to the grains directly, the product is very apt to be more straw than berry. There is scarcely any one thing in which farmers are more deficient than in the management of manures. Mr. Haggerston, the manager of Mr. Cushing's farm, near Boston, finds by experience that a compost made of two-thirds swamp muck and one-third stable manure, fermented together, makes a manure as valuable, and produces as good crops of hay, grain, and roots, as if stable manure alone was used; yet how few there are who ever used a load of muck to enrich their lands, when perhaps they have thousands of loads on their premises. Stable or barn-yard manures, when put unfermented upon land, should be covered, that the earth may absorb the fertilizing gases evolved during the process of decomposition. If they are made into compost with muck or vegetable earth, and decomposed in that state, they will be sufficiently incorporated if spread on the surface and mixed with such earth with the harrow. Compost manures are the most proper for top dressing and renovating pastures or meadows, where plowing cannot be well adopted; but its application should be accompanied with fresh seeding, and a thorough harrowing.

Potatoes require a loamy soil; one abounding in vegetable matter, and moist rather than dry. Gen. Barnum, who has raised greater crops of potatoes than perhaps any other man in the United States, attributes much of his success to his not disturbing the plants in hilling after the rootlets for the tubers begin to form; his method of performing that operation being to bring rich earth in a horse cart, the wheels of which pass between the rows, and from this dropping a shovel full upon each hill. This furnishes a bed of rich, fresh earth for the tubers, and avoids all interference with the roots.

The kitchen garden will require much attention this month; as all plants which are not liable to suffer from spring frosts should now be set out or sown. By beginning in season, we may secure two or three crops of many valuable vegetables in a single season, even where no hot or forcing beds are employed. Salads, radishes, cabbages, potatoes, peas, &c., may now be planted or sown. The earliest varieties of each should of course be selected for the first planting. Asparagus and strawberry beds should be cleaned off, dug over, and manured. None but compost manures of the best kind should be used for such purposes.

If the ghosts of starved-to-death animals were permitted to haunt the men who have so cruelly used them, we have some men in our mind's eye who would have little quiet sleep about these days. Domestic animals were not given to men to be maltreated and starved; and no man has a right to undertake to keep more than he can supply amply with food. Accident or disease may, however, cause the occasional loss of an animal; and when such is the case, don't draw it out into the field to invite the dogs and crows, or leave it by the roadside to offend the olfactories of the traveler; but take it to your field and throw on a few bushels of lime, and cover the whole with earth. Decomposition will take place with little or no offensive exhalation, and the mass used as manure will rival the most powerful. There is not a more disagreeable sight to a good farmer, or one more indicative of an unthrifty one, than to see the apple trees around the barn decorated with dead lambs, or the adjoining meadow strewn with the defunct carcasses of older sheep. If an animal is weak or sick, save it if you can; but if it dies, bury it where it will still profit you. Last year we were walking over the grounds of a farmer in company with the owner, and he pointed out a spot in a field of very badly killed winter wheat, where for some twelve or fifteen feet square the wheat was as large and as thick as it could well grow, and very fine ears. It would attract instantly the attention of any one who looked at the field. The owner assured us he was for a long time unable to account for the appearance of the spot, until he recollected that about a dozen years before, the then owner lost a horse and drew it to that place. Several crops of other kinds of grain and of grass had been taken from the field, and had all exhibited the surprising effect of decomposed animal matter in the growth of crops, previous to the one then upon the ground.

We hope all our readers will remember the advice that has been given in the Cultivator to farmers, not to sell their ashes, and act upon it. There is scarcely any kind of soil on which ashes do not produce a decided benefit; and for the grasses which require so much silicate of potash to the formation of their stems, some alkali is indispensable. Mr. Putnam, of Mass., has lately given the public an account of some experiments, made by him to test the comparative value of ashes and lime in making compost. He made two masses of compost, one of peat earth and 50 bushels of ashes, and the other of peat earth and 50 dollars worth of lime. The first fermented readily, made a fine compost, and proved excellent for every crop to which it was applied; while that made by lime did not ferment or decompose well, and its application in no case seemed to produce any effect. We therefore again urge farmers to keep and use their ashes on their own farms. It is a good plan to sow plaster and ashes on your lands as soon as the vegetation has received sufficient start to be acted upon by them.

Don't allow your boys, or your neighbors' boys, or any biped who calls himself a man, to be strolling about your fields and orchards with a gun, popping away at the beautiful little birds that are such effectual aids in extirpating or checking the progress of the whole race of millers, worms, bugs, grubs, &c., that commit such depredations on the farmer. If you allow this vile slaughter of birds, do not be surprised if your apple trees are stripped by the canker worm, your apples destroyed by the larvæ of the codling moth, your plums by the curculio, your cabbages by the black grub, and your peas by the pea grub. These little birds are the farmer's best friends. True, they occasionally take as a reward for their labor some of the fruit or seeds they have been so active in preserving; but this is no more than equal and exact justice. The person who could dispense with the early carol of the song sparrow, the merry song of the bobolink, or the sweet notes of the brown thrush, may possibly be an honest man, but he has no ear for the fine melodies of nature; "he has no music in his soul."

New-York State Agricultural Society.

MEETING OF THE EX. COMMITTEE.

At the meeting of the Executive Committee on the second Wednesday of March, the Premium List for the next Fair was completed, and the committee appointed at the previous meeting to select the place for holding the Fair, reported that they had examined the several grounds to which their attention had been called, but would not be prepared to report definitely until the next meeting of the Board, which is to be held at the office of the "The Cultivator," on the Second Wednesday of April, at 10 o'clock A. M. A full attendance of the members is particularly requested at this meeting.

ANNUAL EXHIBITION FOR 1842.
(CONTINUATION OF PREMIUM LIST.)

ON FLOWERS.

For the greatest variety and quantity, \$5.
For the second greatest, \$3 | For the third greatest, \$2
For the best Floral Ornament, \$5.
For the second best, \$3 | For the third best, \$2
For the best Seedling Dahlia, \$3
For the second best, \$2
For the best twenty-five varieties of Dahlias, \$5.
For the second best, \$3 | For the third best, \$2

ON FRUITS.

For the greatest variety of table Apples, \$5.
For the second greatest, \$3 | For the third greatest, \$2
For the best twelve sorts, not less than three of each, \$3.
For the greatest variety of table Pears, \$3
For the second greatest, \$2
For the greatest variety of Winter Pears, \$2
For the best twelve Quinces, \$2
For the best twelve Peaches, \$2
For the best twenty-four Plums, \$2
For the best six bunches of Native Grapes, \$2
For the best six bunches of Foreign Grapes, \$2

ON VEGETABLES.

For the 6 best stalks Celery, \$2 | 2 best purple Egg Plants, \$1
3 best heads Cauliflower, \$2 | 2 best half peck Lima beans, \$1
3 best heads Broccoli, \$2 | 2 best half peck Windsor do., \$1
12 best white table Turneps, \$1 | Best bunch double Parsley, \$1
For the 12 best Carrots, \$1 | For the 3 best Squashes, \$1
For the 12 best table Beets, \$1 | For the largest Pumpkin, \$1
For the 12 best Parsneps, \$1 | 12 best ears seed Corn, \$1
For the 12 best Onions, \$1 | Best 4 peck table Potatoes, \$2
3 best heads of Cabbage, \$1 | For the second best half, \$1
For the 12 best Tomatoes, \$1 | peck table Potatoes, \$1
Discretionary premiums will be awarded on choice garden products, not enumerated above.

DOMESTIC MANUFACTURES.

Best pair woolen Blankets, \$3 | For the best 12 yards Kersey, \$3
Best 10 yards of Flannel, \$2 | Best 15 yards rag Carpet, \$3
Best 12 yds. 3 woolen Cloth, \$2 | Best 10 yards tow Cloth, \$3
Best 15 yards wool Carpet, \$2 | For the best men's and
Best double carpet Coverlid, \$2 | boys' cloth Caps, 2 each, \$2
For the best 10 yards Linen, \$2 | Best pound sewing Thread, \$2
Best 12 yards linen Diaper, \$2 | Best pair knit Stockings, \$1
For the best hearth Rug, \$3 | Best pair wove Stockings, \$1

HORTICULTURAL IMPLEMENTS, &c.

For the best assortment of Horticultural Implements, \$10
For the second best, \$5
For the best cast iron Vase, \$5
For the best metal Fountain to stand uninjured through the winter, \$10

TO ARTISTS.

For the best Design of Diploma for the New-York State Agricultural Society—A Gold Medal.
For the best Plan of Farm House, Barn and necessary out buildings—A Gold Medal.

For the best specimen of Floral Painting—A Silver Medal.

THE Designs for a Diploma must be forwarded to LUTHER TUCKER, Rec. Sec'y, Albany, by the 1st of July, 1842. The other Designs on or before the 1st of January, 1843.

NEW-YORK COUNTY AG. SOCIETIES.

CAYUGA.—The winter meeting of this Society was held in Auburn, on the 1st of Feb. at which time one of the most valuable Addresses which such meetings have called out, was delivered by DAVID THOMAS of Aurora. We should be glad to give the whole of this Address, but must content ourselves with the following extract on Tillage:

"The celebrated TULL, observing the extraordinary effects of high culture, concluded that plants fed on mellow earth, and DUHAMEL adopted the same notion. Their philosophy was coarse, but their practice was fine. If we were to follow their example, making plenty of fine earth for the plants—not to feed on, but to drink from, our crops might be greatly increased. One of the chief errors of our husbandry is to cultivate too much land, because it is only half done. Half the quantity with double the work on it, and double crops would be found more profitable.

"I have long believed, however, that no part of the system required reformation more than our management of manures. Manure has been called the wealth of the farmer. When it is taken out in the spring, it is commonly scattered over the ground in large lumps: the plow comes along and covers them or not, as the case may be. If covered, they intercept the ascent of the moisture from below, especially in dry seasons. If not covered, they lie wasting on the ground—of very little value. Indeed some excellent farmers have satisfied themselves that straw manure is unprofitable for summer crops.

"I am far from holding that opinion, however. The error consists in not applying it to the soil in the best manner. In the spring of 1840, I had no ground for field beets, but a small lot where corn had grown for

two years in succession. It was unfit for such a crop without manure, and I had only fresh manure from the stable, which has long been considered most unfavorable to the beet. My necessity, however, prevailed against opinion, and I took the responsibility. From each line where the beets were to grow, two furrows were turned so as to leave a wide dead furrow. Into this the manure was thrown from the wagon, each fork full touching the one just behind it, till the row was completed. It was well covered by turning two furrows together over it, which held it down while the harrow was passing four times in succession, breaking, pulverizing, and mixing it intimately with the soil. Again two furrows were turned together over the row, and the harrow passed twice more—in all six times. By this process the ground was reduced to a fine tilth; and if there were any better beets in the county, I did not see them.

"To me, it was a most instructive experiment. I have often seen manure applied to corn fields, but never in any case where it was so completely incorporated with fine earth. Even in the driest part of that season, the ground was always moist and mellow.

"I am satisfied that we have been too saving of our harrows. Thirty years ago, there was a method of plowing in this country called 'cut and cover.' It was plowing, not to the shares, but the halves—the furrow slice covering the space where a furrow ought to have been. I am apprehensive that our ideas of harrowing were learned in the same school. When grain is sowed is it not the prevailing opinion that it is harrowed enough when the seed is covered? I had a narrow land harrowed sixteen times in one day, and was satisfied that the labor was well applied.

"For beets, or corn, or potatoes, what would be the effect of plowing in a heavy dressing of stable manure, harrowing twice, and repeating the operations of the plowing and harrowing four times more, adding each time to the depth of the soil? I have not yet performed the experiment, but the nearer I have approached it the finer has been the crop. Thorough culture would seem to require that every little lump should be broken, so that the roots could wander freely in every direction, and that every drop of a summer shower, should be caught and retained for future use. Hard land and thin soils have some resemblance to a dish bottom upwards."

SENECA.—We have received a neat pamphlet of some 20 pages, containing the Constitution, By-Laws and Proceedings of this society for the year 1841, including the Addresses of G. V. Sacket and A. B. Dunlap, Esqs., at their fair in October last. The officers for this year, are—G. V. Sacket, Seneca Falls, Pres.—N. W. Folwell, Lodi; T. Boardman, Covert; Wm. R. Schuyler, Ovid; John D. Coe, Romulus; J. Y. Manning, Varick; John Johnston, Fayette; Joel W. Bacon, Waterloo; M. W. West, Junius; Jason Smith, Tyre; and Jacob Kishler, Seneca Falls, V. Pres.—A. B. Dunlap, Ovid, Rec., and Samuel Williams, Waterloo, Cor. Sec'ys—Jas. Stevenson, Jr., Waterloo, Treas.

We are much gratified with the spirit which our friends in Seneca have manifested in support of their Ag. Society. That they have met with the success which must ever attend such efforts, will be seen from the following extract of a letter from a friend in that county:

"We have worthily done up the duties of our agricultural society for the last year, and will improve upon it, this. We passed resolutions at our organization to divide \$300 in premiums; we did so, and after publishing our pamphlet, [a copy of which is to be placed in the hands of every farmer in the county.] we have, through the liberality of our farmers, over \$100 in the hands of our treasurer for next year's operations. We held our meeting last week to arrange for next year, and have agreed to divide \$500 in premiums. We think this looks well for the little county of Seneca."

The Addresses of Messrs. Sacket and Dunlap, from which, did our limits permit, we should be glad to make liberal extracts, are well calculated to awaken an increased interest in the affairs of the society; and we think they have acted wisely in placing a copy of their pamphlet in the hands of all their farmers. That of Mr. Sacket gave a very interesting sketch of the early history and statistics of the county; while that of Mr. Dunlap treats of the "Nobility of Agriculture, and the means by which it can be elevated."

ONEIDA.—The annual meeting was held at Whites-town in Feb. last, when the following officers were appointed:—Pomeroy Jones, Westmoreland, Pres.—Dr. T. Goodsell, Utica; Harvey Bradley, Whitestown; Geo. L. Brigham, Augusta; Lewis Eames, Lee; Dr. S. Case, Vernon; Jno. Townsend, Westmoreland; Henry Rhoades, Trenton; Chauncy Fuller, Paris; A. T. Tyler, Florence; Col. B. P. Johnson, Rome, V. Pres.—Eliot Comstock, Lee, Cor., and R. S. Doty, Rome, Rec. Sec'y—J. E. Southworth, Vernon, Treasurer. It was resolved to raise one thousand dollars the present year, aside from the grant of the state, to be paid in premiums at the next fair, which is to be held at Rome, Oct. 12 and 13.

MONROE.—The annual meeting was held at Rochester, Feb. 19, when the following officers were elected:—Henry Colman, Pres.—Wm. Garbutt, Wheatland; L. B. Langworthy, Greece, and Wm. C. Cornell, Henrietta, V. Pres.—H. M. Ward, Cor. and M. B. Bateham, Rec. Sec'y, Rochester. A Board of Managers and Town Committees were also appointed, and the following resolution adopted:

"Resolved, That measures be taken by this Society for establishing an Agricultural Museum in the city of Rochester, and that a committee of five be appointed to

make inquiry respecting a room for the purpose, and to send a petition to the Governor and Legislature for a set of the specimens of Natural History collected by the Geological Surveyors, and to report at the next meeting of this society."

DELAWARE.—We have received from the President of this Society, Samuel A. Law, Esq., the Address delivered by him at the meeting of this Society in January last. It is a timely and spirited appeal to the farmers of that county, and his arguments are so applicable to those in many other sections of the state, that we should be pleased to transfer the Address entire to our columns. We have room, however, only for one extract. After a glance at the condition of Agriculture in the county, and the necessity of entering upon the work of improvement at once, Mr. Law proceeds:

"Your densest, darkest forests are capable of being converted into exuberant meadows and pastures. And where now owls hoot and wolves howl, may anon be heard the shepherd's pipe, and the milk maid's song.

"And, come faster or slower,—this advanced state of improvement will surely come.

"With us, with you, with the present inhabitants, the risen and rising generation, it rests, and, peradventure, in an eminent degree, with this Society it may rest, to hasten the arrival of this advanced state of improvement.

"Up and be doing aright—and every one may help; every man, woman and child. None so great, none so small, if up and wide awake and doing aright, but may help.

"The humblest farmer who can make two spears of grass grow where but one grew before, can double his crop. He is a giant. Let his shoulder but touch the wheel and it goes. Every man who can make and introduce an improvement; set a beneficial example and induce others to follow it; who can economically raise a better crop; who can most improve his stock, horses, cattle, sheep, hogs and what not,—and most cheaply breed, and raise the most and best of any or all; he and they, all can help. Every one, young and old, rich and poor, can help improve and enrich his country, his county, his town, and (what is last, though not least, with many a one,) himself."

"But,—digression apart,—what can this Agricultural Society do? Much every way,—if they but persist and persevere.

"I have told you what individual energy may do. I add, that combined energy may do much more.

"Proceed then and persevere and prosper. As may well become an Agricultural Society, in every way practicable encourage improvements in farming. Diffuse information. Awaken attention. Proffer, and where well deserved, award premiums. Seek and find, and recommend the most economical and best modes of tilling lands; same as to manuring lands; ascertain and recommend the preferable kinds of crops; encourage the introduction and breeding of improved stock of all kinds; encourage the draining of over wet lands. The produce of many portions of our farms may be doubled by draining. Set examples of irrigation. On thousands of pieces, every where scattered, the produce may be four folded by irrigation. Consider well, and especially encourage leading and staple commodities. Butter, obviously, should be our grand staple. Wool, or perhaps more probably, the raising of stock, may stand as second."

RENSSELAER.—At the annual meeting held in Troy, in Feb. last, after an Address by D. L. Seymour, Esq., officers were chosen, as follows:—Joseph Hastings, of Brunswick, Pres.—Joseph Coons, George T. Dennist n, Z. P. Burdick, Isaac Akin, J. A. Fonda, Samuel W. Hoag, Henry Hull, Clark Baker, Wm. Van Vechten, James H. Jones, Jacob A. Ten Eyck, Henry W. Koon, Daniel H. Gardner, Richard P. Hart, Henry Burden, V. Pres.—Giles B. Kellogg, Sec'y—James M. Stevenson, Treas.—George Vail, W. P. Van Rensselaer, Martin Springer, Alexander Walsh, Henry D. Grove, Wm. A. McCulloch, David L. Seymour, A. D. Spoor, Samuel S. Fowler, Matthias P. Coons, Ex. Committee. Their fair for 1842, for which a liberal Premium List has been made out, is to be held at Lansingburgh on the first week in October.

ONTARIO.—We have received the List of Premiums to be awarded by this Society at its next Fair, which is to be held at Canandaigua, on the 12th and 13th days of Oct. next. It embraces a great variety, the prizes amounting to 164 in all.

WAYNE.—Officers for 1842:—Samuel E. Hudson, Palmyra, Pres.—E. T. Aldrich and J. A. Miller, Arcadia; Cullen Foster, Lyons; Wm. Walmsley, Rose; John Baker, Macedon; John Borraile, Williamson, and Wm. Swales, Sodus, V. Pres.—Cyrus S. Batton, A. Fairchild, T. Heminway, A. L. Beaumont, and P. G. Price, Ex. Com.—D. M. Keeler, Rec. and Stephen Culver, Cor. Sec'y.—Jos. A. Miller, Treas.

TOMPKINS.—Officers for 1842:—Nicol Halsey, Ulysses, Pres.—Nathan Benson, Groton; William Carman, Hector; Luther Gere, Ithaca; Joshua North, Lansing; H. Nurse, Danby; Henry R. Morrell, Caroline; George Jones, Newfield; Warren Phelps, Enfield; Robert C. Ellis, Dryden, V. Pres.—Nathan T. Williams, Treas.—Lewis A. Morrell, Lansing, Cor., and George P. Frost, Ithaca, Rec. Sec'y.

STEVEN.—At the last annual meeting, the following officers were appointed for 1842:—Lazarus Hammond, Pres.—Otto F. Marshall, Israel R. Wood, and Lyman Balcom, V. Pres.—Ziba A. Leland, Cor., and Theron Loomis, Rec. Sec'ys—Henry Brother, Treasurer

Answers to Inquiries, &c.

SIXTEEN INQUIRIES.

The following inquiries from "J. A. S.," of Reading, Vt., embrace almost the whole circle of agriculture; and to answer them fully would require a volume, rather than the limited space we can give them.

"1. On light loamy land, inclining to sand, is it necessary to plow in the fall?"

We think not. Heavy clay soils are the ones most benefited by fall plowing, as the frost aids in pulverizing such lands; a process not necessary in sandy ones. Fall plowing is admissible on heavy retentive lands, or where worms, such as the grub or wire worm abound; as late fall plowing aids materially in destroying these. In other cases, spring plowing is best.

"2. Is it best to omit breaking up in the fall where you intend to plant corn or potatoes?"

If turf land, intended for such crops, is covered with long manure, and then carefully turned over in the fall, rolled down and harrowed, a top dressing of compost, and a thorough harrowing, is all that is necessary to fit it for seed in the spring, and a good crop may be expected.

"3. How will it do to break up, and stock down the same year with oats, turning the manure under the sod?"

Well. We have done this many times, with the exception that we have generally used barley or spring wheat instead of oats. Generally, however, when manure is applied to the soil, a crop of corn or roots should follow, and the seeding down take place the next year with spring grain.

"4. What will be the effect upon the land and crop?"

Good on both. The manure and the turf rotting will enrich the soil, while the crop will scarcely fail of being a good one.

"5. What manure is best adapted to such a course?"

Long barn-yard or stable manure is to be preferred. Compost manures are best applied to the surface, and only harrowed in; not turned under.

"6. What is the most speedy mode of rendering productive old meadows, impoverished by bad cultivation?"

Two modes may be adopted, either of which will be successful. If the land is fit for the plow, manure with barn-yard manure, invert the soil, and re-seed without cropping. If the plow cannot be used, manure the surface liberally with compost manure, scatter grass seeds on the land, and harrow until the surface earth is thoroughly stirred. It will give new life to the old roots, and establish the new ones.

"7. Does land 'leach,' or do the gases of the manure evaporate, or both? If the former, how prevented?"

Coarse, porous soils of gravel or sand undoubtedly leach, or allow the soluble parts of manures to sink with the water that passes off so quickly. In most soils, leaching can be prevented by the addition of clay, as that is strongly retentive of water, and holds that and the soluble salts for the use of plants. That the gases of manures pass off by evaporation, the nose gives conclusive testimony. Mixing such manures with earth, muck from swamps, &c., will prevent this loss.

"8. Is there any way to renovate old pastures that are so steep and rocky that they cannot be plowed?"

None that we know of. Such pastures may be benefited by sowing upon them ashes and plaster. Renovation is scarcely possible without the use of the plow.

"9. What are the best grasses for permanent pasture?"

In this country, a mixture of Timothy, red top, or Herd's grass, orchard grass, and white and red clover, has been found the best for meadow or for pasture. On the best managed farms at the present time, permanent pastures are not admitted. The whole farm is made capable of producing any of the cultivated crops, and all parts are in turn subjected to tillage, meadow and pasture.

"10. What is the effect upon the soil, and succeeding crops, of cutting over a piece of wood land, and letting it lie three or four years without burning?"

In most districts, the effect would be to fill the land with weeds of all kinds; Canada and common thistles, bur weeds, johnswort, everlasting, &c. &c. The best way in our opinion is to clear the land and seed it, letting it lie until the roots are rotted so as to admit the plow.

"11. What is the comparative value of common barn-yard manure, and manure or compost composed of stable manures, swamp muck, &c.?"

We have used comparatively little compost manure in farming, preferring to apply the barn-yard and stable manures at once to the soil; but Mr. Haggerston, the manager of the celebrated Cushing farm at Watertown, Mass., says that a compost made of one-third manure and two-thirds muck, has never failed with him to produce better crops of all kinds of vegetables than clear manure; and for the last five years he has thought it wasteful to use manures without being mixed with muck. The compost manure which he uses for plowed land is made of two-thirds muck and one-third manure.

"12. In the present depressed state of stock, is it as profitable to feed out hay on a farm where there are good resources for making manure, as to sell it for ten dollars a ton?"

The difficulty with farmers usually is, that when they have sold their hay for ten dollars a ton, they are loth to pay out their dollars for manure; and the consequence is, their farms and crops go unmanured. It is doubtless, many times, better to sell hay and buy manure, than to feed it out; but the resources and the cost should be well

calculated before a farmer allows the materials of manure to leave his farm.

"13. Why will not beech wood ashes make as good soap as ashes of any other kind of wood?"

Admitting what is stated to be fact, we are unable to account for it; but we very much question the correctness of the implied opinion, that beech wood ashes will not make soap. The following table of the relative properties of oak, elm, and beech, taken from the experiments of the superintendent of the national works at Paris, will show they are not destitute of potash:

Oak gave in 915 pounds of wood, 12 pounds of ashes, and 1 pound, 6 ounces, 4 grains of potash. Elm gave in 1028 pounds of wood, 24 pounds of ashes, and 3 pounds, 15 ounces of potash. Beech gave in 887 pounds of wood 5½ pounds of ashes, and 1 pound, 4 ounces, 6 grains of potash. Fir gave in 730 pounds of wood 2½ pounds of ashes, and 7 ounces of potash.

We think if "J. A. S." will use beech ashes, put plenty of caustic lime at the bottom of his leach, and see that his lye floats an egg well, he will have no difficulty in making soap from beech ashes.

"14. How can poison ivy be exterminated?"

This is a plant with which we are unacquainted, but presume that digging it up, "root and branch," would be the death of it.

"15. Is it not better to keep stock at the barn late in the spring, rather than permit them to feed down meadow land?"

Certainly. Farmers err much in allowing their cattle to run over their meadow lands or pastures before the ground is settled or the grass started. Animals should be fed at the barn till there is a pretty fair bite of grass, or they will fall away rapidly.

"16. Upon what soil do potatoes do best?"

Upon those that are moist, rather than dry, and abounding in vegetable matter or mold. A heavy, compact soil is unfit for potatoes, as the young tubers cannot find nutriment, or room for easy expansion in such earth. Compost is the best manure for potatoes; and dunging in the hill with long or stable manure is not advisable.

We have never tried sowing corn broadcast for fodder; but if "J. A. S." will turn to the 12th page of the current volume of the Cultivator, he will find the result of an experiment made by Mr. Ellsworth, which was very successful, and would seem to justify a repetition. Corn fodder is excellent for all animals to which we feed it, and maintains them in fine health and condition. To be good, however, they must be saved well, and not put up wet and moldy, as is too often the case.

PREPARATION OF CORN FOR MARKET.

The subject to which the following inquiries of our correspondent C. L. B. of Ohio, relate, is one of very great importance, and we hope some of our friends who are practically acquainted with the process of kiln drying corn, and preparing it for market, will, at an early day, respond through the Cultivator to the inquiries. There can be no good reason, we think, assigned why, at the present low price of corn in the western states, it might not be profitably put up for exportation. If so, a very important point in the commerce, as well as agriculture, would be gained, and the heavy balance of imports against our exports proportionably diminished. The ability to export corn successfully would add much also to the prosperity of the West, morally as well as agriculturally, since, says our correspondent, owing in part to the "present low prices of corn, all our distilleries are in full operation." But to the inquiries:

"The principal difficulties to be overcome in preparing corn for market are, the liability of Indian corn to heat while lying in bins, or during its transit to the coast, the cost of transportation, and the want of a knowledge of the process of drying corn, and putting it up for the market. How are the kilns constructed? May heated cylinders be used for this purpose? And if so, how are they constructed? In what manner, and of what materials should the casks for packing be made? Of what wood, and how hooped? For what ultimate purpose in the course of this trade may they be designed?"

DISEASES OF BEES.

At page 76 of our last vol. we inserted an inquiry from Mr. Quimby, relating to a disease which destroyed the larvae or grub of the bee in the cell. Mr. Weeks and Mr. Hall responded to Mr. Quimby. As every thing relating to the management of bees is of consequence to the Apian, we give another communication from Mr. Q. in hopes that a remedy may be discovered for the disease of which he complains.

"Mr. Weeks says, in answer to my inquiries on bees, that cold chills the young brood, and the remedy he proposes, is to close up the bottom board, leaving only room for the passage of the bees. This is the very thing I have done for years during the spring months; though I did it to prevent robberies, placing under the hive a board similar to the one described by him. When managed according to his directions, he warrants them free from dead chrysalis. Mr. Weeks appears to misunderstand me; for dead chrysalis is not what I inquired about; (I never had but one hive in which they suffered, and was satisfied at the time that cold was the cause), but the dead larvae or grub is what I complain of, before its change to the chrysalis state. There is certainly a difference in the two stages of the insect. Mr. Hall says that cold is one cause, filth under the hive another, dampness another, &c. I can assure him, I know to well the value of their

labor to allow any such thing to remain in their way. I long since ascertained that the care of the apiary was as well paid as the care of the garden or the farm, and a little better, notwithstanding one hive in fifteen on an average is diseased. But I cannot think cold to be the cause, for the following reasons: Some of my neighbors in the month of March have their hives an inch from the board, and let them remain so through the season, escaping healthy. Swarms even the first season are not exempt, (though old hives are the most liable.) I had two or three the past summer affected. I think it will not be pretended the chills of spring caused the disease in these.

But what is the cause? That, with me, is the question. Will any of the patent hives be warranted to preserve bees exempt from disease if I use them?

Corzaekie, 1842.

Moses Quimby.

GESTATION IN ANIMALS.

MESSRS. EDITORS—In the January number of the "Agriculturist," published at Nashville, I read the following remarks on gestation. As the period here assigned to the animals named, particularly the cow, differs somewhat from the commonly supposed one, I will thank you to state the time fixed by such authorities as you may be able to lay your hands upon:—"The cow, from the time she takes the male till she drops her young, goes almost 280 days. We have never known them vary three days over or under. The sow goes about 112 days, but varies from one to five or six days. The ewe goes about 5 months. The mare goes about 11 months, but varies sometimes 20 days."

OHIO.

In a recent German publication of great research and accuracy, the period of gestation and incubation in nearly all the domesticated animals is given, from which we select a few included in the inquiry of Ohio.

Animal.	Shortest period.	Mean period.	Longest period.
Mare,	322 days,	247 days,	419 days.
Cow,	279 do.	283 do.	321 do.
Sow,	119 do.	115 do.	143 do.
Ewe,	146 do.	154 do.	161 do.

According to the report of M. Teissier of Paris, who had charge of the experimental farm established by the government of France, of 582 mares which received the male but once, the shortest period was 287 days, and the longest 419; making the extraordinary difference of 132 days.

The most satisfactory experiment with cows, on record, is that made by order of Lord Spencer, in which the period of gestation in no less than 764 cows was carefully noted. From this, it appears that the shortest period in which a live calf was produced was 220 days; but no calf produced at a less period than 242 days could be raised. The longest period of gestation was 313 days. From Lord Spencer's tables, as given in the Journal of the Royal Agricultural Society, it appears that 314 cows calved before the 284th day, and 310 calved after the 285th day; so that the probable period of gestation in the cow must be fixed at 284 or 285 days.

The results of M. Teissier's experiments on cows does not vary greatly from those of Lord Spencer. His tables show the following terms in 575 cows:

21 cows calved between the 240 and 270th day.	Mean, 259]
544 do. do. 270 and 299th do.	do. 282
10 do. do. 299 and 321st do.	do. 313

Prof. Johnson remarks, "that any calf produced at an earlier period than 260 days must be considered decidedly premature; and any period of gestation exceeding 300 days must also be considered irregular; but in this latter case, the health of the produce is not affected."

PAGE'S PORTABLE SAW MILL.

In answer to the several inquiries which we have received in relation to this mill, we copy the following from the American Farmer of the 9th of last month:

"We witnessed on Saturday last the trial of a new Portable Saw Mill, propelled by a *Portable Steam Engine*, at the factory of Mr. George Page, of this city, which we learnt was built by him for a company of gentlemen in Virginia. The trial was made with a view of testing the perfection and strength of the mill, as well as its capacity for labor, before delivery. To say that we were gratified at its performance, is to speak not only our own sentiments but the unanimous voice of every one present.

"The mill cut, after it got into perfect operation, a board 11 feet 8 inches long by 14 inches broad, which is equal to 13½ feet board measure, in 50 seconds.

"If we take this as the measure of its competency, it is capable of cutting 11,644 feet in one day, allowing 12 working hours, and if allowance be made for contingencies, we think it fair to assume, that with a power equal to 10 horses, it can with ease cut 10,000 feet in a day.

"As this mill will be removed in a few days to its destined home in Virginia, it strikes us that the government at Washington would do the country good service by having it set up at some convenient point in the capital, where its wonderful powers could be made manifest to the assembled wisdom of the nation. The mill could be set to work in less than a day after its transportation thither, and from our knowledge of Mr. Page, we have no hesitation in saying, that he would not only consent, but afford every facility to render the exhibition interesting.

"In every section of our country such a mill is valuable; but in all newly settled parts where timber abounds, it would prove invaluable. Such being the case, we

think it due to the people that their representatives should have an opportunity of judging of its merits, in order that their constituents may profit by their knowledge."

SEEDING DOWN LANDS.

"A. W. S." of Hempstead Harbor, is informed that the method he has proposed of manuring, plowing and seeding lands to grass, without a crop of grain, has been practiced in some parts of New-England with great success, and is highly recommended by Mr. Buckminster of Boston, and other practical farmers. Where the soil is sufficiently rich and in good condition otherwise, we should turn over the turf, manure on the surface, and put on some spring grain with the grass seeds; but on light, or partially exhausted lands, simple re-seeding is to be preferred.

There will be no difficulty in seeding the side hill to which our correspondent alludes; as grass seeds thrown upon such a soil will scarcely fail of vegetating. If the soil is very dry, the young plants will not make much headway the first season; but when once rooted, such places make very good pastures.

Orchard grass seed may be obtained, we presume, at any of the city seed stores. The principal point in which it differs from the ordinary cultivated grasses, is the facility with which it grows in the shade of trees; making a fine sweet pasture, or good hay, in orchards or other places where the common grasses will not flourish.

RENOVATING OLD MEADOWS, &c. &c.

L. DURAND inquires "whether old meadows, where the grass is bound out by moss, cannot be restored by harrowing well in the spring, and sowing on plenty of grass seed before harrowing?"

Such a process will succeed, and the result will be still better, so far as the moss is concerned, if a liberal dressing of ashes precedes the harrowing. Some good farmers, however, prefer turning the turf of such meadows over, and then either taking off a crop of some grain with which grass seeds are to be sown, or seeding down at once without cropping. If a crop is taken, compost manure should be harrowed in; otherwise a partial impoverishment of the soil will take place.

We have never tried harrowing winter wheat or rye in the spring; but in the wheat districts of Western New-York it has been tried with success. Generally, soils that will admit of spring harrowing are those that do not require it, as harrowing is intended as a remedy for freezing out; and on dry, porous ones, grain rarely suffers from such a cause.

For an apple nursery, the ground chosen should be deep, rich, and perfectly free from all stagnant water to as great a depth as the roots will usually penetrate. The seeds may be sown in rows four or six feet apart. In the latter case potatoes may be planted between them the first year. The ground must be kept clean, and the trees thinned out so as not to crowd each other. If the growth is a good one, they should be grafted the second or third year, as this is the only mode of securing the choicest fruits.

In planting forest, or ornamental trees, we have been the most successful when we have clipped the natural crown of the tree quite close. The young shoots have been more vigorous, and a handsomer head to the tree has been the result. If, in transplanting, the roots with the earth attached could be removed, as recommended by Mr. Stuart in his *Planters' Guide*, a removal of the top would be improper and unnecessary. If the top is left on transplanted trees, the wind operates on them with more force, and they should be guarded against it. Trees will do better when removed not to be placed deeper than they originally stood in the forest or nursery; as deep planting, or a partial covering of the trunk, is very injurious.

NICKING HORSES.

"COLONUS" makes the following inquiries as to the mode of nicking horses:

1. What season of the year is best for this purpose?
2. What is the best method of operating?
3. What should be the after treatment?

While we enter our protest against nicking, pricking, or other mutilation of the tails of horses, as barbarous and unnecessary, we shall, as the practice demanded by pride will probably be continued, give a few plain directions as to the best manner of performing the operation.

The tail has three set of muscles; one elevating it, another depressing it, and a third set for the side motions. The depressing muscles seem to act more constantly and powerfully than the erector muscles; and thus in some cases, the tail is constantly bent down close to the buttocks. It is to overcome this tendency, and give that elevated position to the tail supposed to indicate energy and spirit, that nicking is intended. Very hot, or very cold weather is unsuitable for nicking horses; as in the first case flies are troublesome, and in the other severe cold operates injuriously to fresh wounds. Still, nicking may be performed at any time, suitable precautions being used.

In operating, the best way is to cast the animal. The hair at the end of the tail is doubled and securely tied for the purpose of attaching a weight to it. The operator holds the tail firmly, ascertains the center of one of the bones from two to four inches from the root of the tail, according to the size of the animal. With a sharp

knife, the muscles are divided deep from the edge of the tail on one side to the center, and the incision is continued across the tail making it as deep on the other side. This may all be accomplished by one steady, rapid stroke of the knife. For a blood horse, one incision is considered sufficient; but where a cocktail is required, three incisions or cutting the muscles are made, care as in the first case being taken that they are made midway between the joints of the tail. Considerable care is requisite to separate the muscles equally on each side of the tail; else it will be carried sideways. Pledgets of tow must now be introduced deeply into each wound, and confined, but not too tightly, by a bandage. Too tight bandaging frequently has a bad effect; swelling and inflammation, and sometimes death, ensuing. Twenty-four hours after the operation, the bandage must be wholly removed.

To prevent the divided muscles from again coming in contact and uniting, the wounds must be kept open; and this is accomplished by keeping the tail curved back for some two or three weeks. To do this, a cord is attached to the hair of the tail some two feet in length, and to this a double cord is fastened, each division going over a pulley at the back of the stall some few feet from each other. To these cords weights are attached, sufficient to keep the tail elevated, and the incisions open. Let it be remembered, however, that the elevation is given by the depth and number of the incisions, and not by the weights; and no more should be added than is necessary to keep the incisions open; more than this is tormenting the horse unnecessarily. The dock should not at first be brought much higher than the back; but it may gradually be raised to an elevation or curve of 45 degrees. Taking out of the pulleys, and gentle exercise, should be practiced once or twice each day; but the pulleys cannot be dispensed with until 12 or 15 days after the incisions are healed, as the divided parts will have a disposition to contract, and render useless the operation for some time. If there is much inflammation, the tail must be washed and fomented with warm water; and to prevent the loss of the hair, it should be unplatted and combed every fourth or fifth day.

SOWING CORN BROADCAST.

A correspondent asks the quantity of corn that should be sown broadcast on an acre, where it is intended for soiling, and for winter provender.

We have never sown any corn broadcast; but we think there is no way in which a greater amount of valuable food could be obtained from an acre than this. At page 12 of the current volume of the *Cultivator* is the history of an experiment made by Mr. Ellsworth, of Washington, that was eminently successful. He sowed four and a half bushels to the acre, and he estimated the first crop to weigh over 100 tons when cut. The second crop the same season was but little inferior. It is evident the weight of the crop would greatly depend on the kind of corn used, (the southern varieties producing much the greatest bulk,) the time of cutting, and more than all, on the richness of the soil.

HEMP.

J. KING, Esq., of Dubuque, Iowa, inquires as to the best soil for hemp; its preparation, the period of sowing, quantity of seed, &c.

Hemp succeeds best in a rich vegetable soil; but any soil that will grow good wheat or corn will also grow hemp. Low lands occasionally flooded, swamps when thoroughly drained, as these contain large quantities of decomposed matter, produce fine hemp; but there is scarce any land that will not produce this crop when made sufficiently rich.

Soil intended for hemp should be plowed so as to reduce it to a fine tilth, free it from root weeds, and fit it for covering the seed. Old meadows are good for hemp; but the turf should be turned in the fall, well levelled, and the surface rendered fine by repeated harrowings. Hemp is more liable to be injured by frost than flax; consequently, should be sown a little later—say from the first to the middle of May.

The quantity of seed should be from two to three bushels, according to the richness of the soil, the average being two and a half; and the seed is sown broadcast. It is better that too much seed rather than too little should be given; as when well seeded, the stalk will be slender, and the hemp of better quality than if the stalk is large and coarse. The hemp is fit to cut when the male hemp begins to wither, and the seed of the other plants is formed, but has not become hard. If the land is rolled at the time of sowing it will assist the germination of the seeds, and render the process of cutting or cradling more complete and easy.

BEEF SUGAR.

"J. C. C." at Fairfield, Ia., inquires for some "information on the subject of the manufacture of beef sugar."

We are sorry to say, that after all that has been said or written on the subject of sugar from the beet in this country, we have not learned a single instance where the success of the method adopted was such as to justify hopes of rendering the manufacture profitable. To what cause this is owing, we are unable to say; whether to want of skill in the operations, or of saccharine matter in the beets; but we are inclined to attribute it to a deficiency in the latter. In one instance we have known a farmer carry a few bushels of beets to a cider mill, grind them, press out the liquor or juice, and boil it down at

once. A very respectable sweet, partially grained, was the result; and this process, simple as it was, was the most successful we have yet heard. If any one of our friends are practically acquainted with any process, simple and yet successful, we should be pleased to lay such a method of making beet sugar before our readers.

MOOER'S PLOW.

OUR correspondent "C. L. V." of Flushing, will find his inquiries relative to this plow answered by the advertisement of the patentee in the last *Cultivator*. Its method of working, prices and its advantages over other plows, are there fully detailed. From the excellent work done by this plow, and its ease of draft, we are inclined to think that the most celebrated plows of the country will find in the side hill plow of Mooers a for midable rival.

VERMIN ON POULTRY.

"A Subscriber," who inquires "whether there has been any successful remedy for the extirpation of vermin on fowls," is informed that in this case prevention is better than cure; that a plentiful supply of food, roots free from filth, and a box of ashes and sand for them to dust or wallow in, will keep vermin from fowls. We know no method of cure, that is certain, where the fowl is infested as they sometimes are; though it is probable an effectual washing in some of the steeps so fatal to vermin on other animals would succeed with these. It is said that the water in which potatoe skins have been boiled is an effectual cure for most kinds of vermin.

FAT SHEEP.

E. S. HINMAN, Esq., (New-Haven, Vt.) has furnished us with the weight of mutton and 'allow in a sheep killed by him last November. The sheep was a wether, bred from a three-fourths merino ewe, and a one-half blood Saxon buck. The ewe giving little milk, the lamb was raised by hand on cow's milk; or was what is called a cosset. It run with the cattle, never had any other feed than grass or hay, and was 5 years old the last spring. The weight of tried tallow was 43 pounds; the weight of the quarters, with the kidneys in, 79½ pounds. The sheep was not larger in bone than common wethers whose quarters will weigh 50 pounds. Mr. H. says—"I do not know as this yield of tallow is anything extraordinary, but have met with nothing in this vicinity that has equalled it."

ARTIFICIAL WATERING PLACES.

WE have received from our correspondent, L. DURAND, of Derby (Ct.) an account of experiments made by himself and his friend G. Smith, Esq., in the formation of watering places on the plan recommended by Mr. Robertson, of Fishkill, in the July number of the *Cultivator*. The experiments were made in the extreme drouth of August, on a dry loam soil, and were both failures. We have never been able to see how water should be obtained in that way, except in soils that were strongly retentive; and we think that all efforts to obtain permanent supplies of water by Mr. Robertson's method, in soils that are porous, sandy or gravelly, will be unavailing.

PERMANENCE OF BLOOD IN ANIMALS.

THERE are few farmers who are unacquainted with proofs of the singular tenacity with which the peculiar characteristics of any kind of animal will cling to the race in spite of crossing or skillful breeding; frequently appearing after several generations, and sometimes when the origin of the peculiarity had been forgotten. This perpetuation of singularities in conformation is not confined to brutes. There is a family in England in which for a great number of generations a tendency to disease (it can be called nothing else,) has existed, which in the individuals affected, covers them with a kind of scales. Sometimes in the branches of the family no one is affected for years, and the tendency seems to be lost; when suddenly it reappears, and several scaly individuals follow in succession. We are acquainted with a very respectable family from one of the New-England states, in which the monstrosity of the fifth finger, with some intermissions has been continued through many generations; disappearing in one branch of the family, apparently, only to appear in another. In a late number of the *Maine Farmer* is a statement respecting Mr. F. Wingate's stock, from which we gather the following curious particulars: 42 years ago Mr. W. moved into Hallowell, and brought with him a polled cow and bull. The bull was sold and driven away; but a bull calf was raised from the cow, which lived till he was two years old, when he was shot in the evening for a bear—being without horns and black. This was some 35 or 36 years since; and since that time no polled bull has been with his stock, and yet they have always had animals of the polled breed. Mr. Wingate has a cow that has raised two calves that had horns; last spring she brought a fine polled bull calf. "In this instance, none of the polled breed as sires have been with Mr. Wingate's stock for nearly 40 years," and yet the polled blood continues to show itself among the calves. Since it is thus difficult, if not impossible, to eradicate the constitutional characters of animals, breeders cannot be too careful in their selections, and in their crosses, as good or bad points will show themselves sooner or later.

Original Papers from Contributors.

AGRICULTURE OF VIRGINIA.

MESSRS. GAYLORD & TUCKER—Inclosed you will receive a five dollar Virginia bill, for which you will please send me six volumes of the Cultivator for the present year. Four of these I intend distributing among my neighbors gratis, provided they will not pay me for them, as I think it will improve the agriculture of the neighborhood. It is useless for me to say that you are ahead of us in improvement. We cultivate too much land, and improve too little. Tobacco is the principal staple of Eastern Virginia; consequently, all of our best lands are cultivated in that plant. If we were to raise less tobacco throughout the United States, we could get as much for the quantity raised, and have more time for improvement, as a large portion of our labor is devoted to that crop from the time of seeding until it is ready for market, which is from 14 to 16 months.

I am of a different opinion to some of your correspondents in regard to the size of farms. I think, where the force is sufficient to keep the fencing in repair, that a large farm may be improved cheaper than a small one, taking size into consideration. Land that has any soil will produce clover or grass. Every farm should be divided into 4 or 5 shifts (as we Virginians call it.) No. 1 cultivated first year in corn, roots, or tobacco, as the case may be, and sowed in small grain, clover or grass, the ensuing fall and spring. No. 2, second year cultivated as number one, and so on, until all have been cultivated. If the fields have more land than can be tilled well, the balance should remain in clover or grass, and occasionally sowed in wheat, oats or rye. All briars, bushes, &c., should be kept under and grazed but little. A farm managed in this way will improve yearly; as each shift will have a rest of 2 or 3 years, which is equal to a light dressing of manure, besides the labor of hauling, scattering, &c. Experience teaches me that it is best to scatter manure broad-cast, as all the land will receive nearly an equal portion; whereas, if it is put in the drill, the crop will nearly exhaust it; and the crop of small grain will be more uneven. If land is once made rich, and managed in the 4 or 5 shift system, it will improve yearly, provided it is not grazed too close, nor suffered to wash away.

There is one subject which I have never seen mentioned in the Cultivator; that is, cutting hill side ditches. They not only keep the land from being too wet, without it is a very wet season, if the water is carried off in the right place. Every farmer who has broken land should have a level, (fig. 33) and trench his hill sides. The construction is very simple; it is nearly in the shape of a raft. Take two pieces of plank about 10 feet long, 3 inches wide, half an inch thick, and square the ends you design for the top, nail them together; also nail a piece across 3 or 4 feet below—equal distances from each end—fasten a plumb to the centre of the top, place your level on a level floor, change it until you get the plumb to hit in the center, and you have a level.



Half an inch fall should be allowed for every 10 feet. The cheapest way to cut a ditch of this sort, is for one hand to take the level and one a hoe; lay off the place where you want the ditch made, make chops at every place where the level stands until you get through them with a Daggon plow, following the chops; throw the dirt down hill for several furrows, then with the hoe scrape out the loose dirt, and you have a hill side ditch. If the land is much broken, several ditches are required.

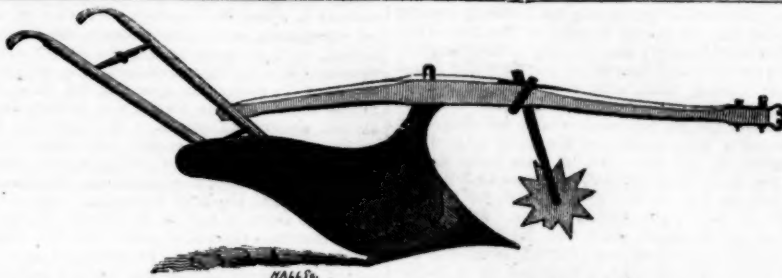
PYRANT EASLEY.
Pittsylvania Court House, Va., Feb. 5, 1842.

CORRECTION—MANURES.

MESSRS. GAYLORD & TUCKER—There is an error, either of mine or thine, which I deem necessary to be corrected. In the rotation crops of my farm, as given in your February number, Field No. 3 stands there represented as rye, when it ought to be oats. This is somewhat material in my opinion, as the principle of two crops of one description immediately succeeding one another in the same field, I have always considered bad. I therefore trouble you with this communication, and beg to add my experience of preserving manure through last summer; kept inside of barn (a frame barn very open,) under a temporary shed, and in the open air. Having only had sufficient time to get out about one-half of the winter manure of 1840-41, in the spring, contrary to my wish, in consequence of continued unfavorable weather during the early part of last season, I took the part from the south end, or the most exposed, and covered the remainder in yard and shed with a thick coat of straw left after the winter was over; having during the winter kept sufficient straw in yard, &c. to absorb urine. In the fall, when removing same to field for wheat, I was most agreeably disappointed in finding the exposed manure with its coating of straw in perfectly good order, having not undergone the least appearance of fermentation; that in the shed, partially so; and that in the barn, altogether deprived of its best properties, although there was no floor of plank, but lay on ground; and that in the north end of barn which had no underpinning.

P. FALCONER.

Conestogo, Warren Co., Pa., Feb. 1842.



THE LIVINGSTON COUNTY PLOW—(Fig. 34.)

To which was awarded the First Premium of the New-York State Agricultural Society in 1841.

MESSRS. GAYLORD & TUCKER—I find that the plow is beginning to claim that attention with the practical farmer that its importance demands. In the first place, unless the soil is well plowed, no man can expect to raise a good crop. Again—plows should be so constructed as to do the work well, with the least possible labor to the team and holder. Also, the cheapness and durability of the article is to be taken into account with the farmer. During thirty years' experience in farming, with all the great varieties of plows in our country, I have never found one that combined the above qualities so fully as the Livingston County plow, (fig. 34) invented by T. Wiard. This opinion appeared amply sustained from the fact, that at the trial of plows at the agricultural fairs in the counties of Ontario and Onondaga, and several other places, it received the first premiums in 1840.

Again, I find that it won the first premiums last fall at

the same place—also in Tompkins county; and at the late state fair held at Syracuse, the first premium of \$30 was awarded to H. Delano for the same plow. Our soil in this county is uniformly heavy and hard, requiring a good plow and strong team to do the work well. And I find that I can do as much work with the Livingston County plow with a third less team than any other plow I have ever had on my farm, and with much less labor to the holder. I believe the plow can be manufactured and afforded to the farmer in any part of the country from \$6 to \$10. The difference of price will be in the cost of the material. The whole weight of the plow does not exceed 100 pounds.

The above are some of my reasons for recommending said plow to my agricultural brethren throughout the country, believing it to be as near perfect as an article of the kind can well be made. HOLLIS KNOWLTON.

CHEMICAL MANURES.

MESSRS. EDITORS—If it would not savor too much of presumption in one who, but a few weeks ago, was anxiously seeking direction from you and others, as to the best method of making chemical manures, I would undertake to correct some of your statements to "Farmer Hodge" upon the manufacture of urate; and as I deem correct information upon this subject of immense importance to agriculture, with your permission, I will make the effort. You remark in answer to some inquiries from "Farmer Hodge"—"when ammonia comes in contact with plaster it is absorbed by the plaster, and the plaster rendered more fertilizing than before."

This is a mistake. Hear what Prof. Liebig says: "carbonate of ammonia, and sulphate of lime, (gypsum) cannot be brought together at common temperatures without mutual decomposition. The ammonia enters into combination with the sulphuric acid, and the carbonic acid with the lime, forming compounds which are not volatile, and consequently destitute of all smell."

From this extract you will readily detect your error. As far as decomposition takes place, there is only a change of acids; but if the urine is evaporated upon the plaster, and the mass pulverized, it will be rendered a powerful fertilizer, because the sulphate of ammonia and other valuable salts would be mixed with the plaster, but not "absorbed by it." This is a very important distinction to make. If the plaster "absorbed the ammonia and combined the other salts of the urine," the manufacturer would be ready to throw off the liquid excrements as worthless, and dry the plaster for sowing. After the chemical action takes place, nearly all, if not all, the valuable salts are still held in solution with the urine, and must be evaporated upon the plaster, or distributed to the soil in the liquid state. I had well nigh sustained considerable loss from falling into this error myself, and was saved from it only by consulting a practical chemist.

The well intended effort of your correspondent "Wm. Partridge," in the November number of the Cultivator; upon a more careful examination, I am sure he will correct some errors into which he has fallen, especially where he recommends the use of caustic lime in the manufacture of sulphate of ammonia. Lime has no affinity for ammonia; and when the sulphate of ammonia has been actually formed, the moment it is brought into contact with lime, will be liberated and driven off.

Any one feeling an interest in this subject may make the following chemical experiment, and they will be convinced. Take a small quantity of carbonate of ammonia, procured from the shops, dissolve it in a glass of water, add sulphuric acid slowly, until effervescence ceases. By this process all the carbonate of ammonia will be converted into the sulphate of ammonia, which has no volatility, and is completely deprived of smell.

* Note by Editors.—The remark, here alluded to by our respectable correspondent, was made on the authority of the following extracts from Liebig:

"If a field be strewn with gypsum, and then with putrid urine or the drainings of dunghills, all the carbonate of ammonia will be converted into the sulphate, which will remain in the soil." "If we strew the floors of our stables from time to time with common gypsum, they will lose all their offensive smell, and none of the ammonia which forms can be lost, but will be retained in a condition serviceable as manure."

We should have said "combined," instead of "absorbed," as the former expresses the operation that takes place, converting the carbonate into a sulphate, which mere absorption would not do.

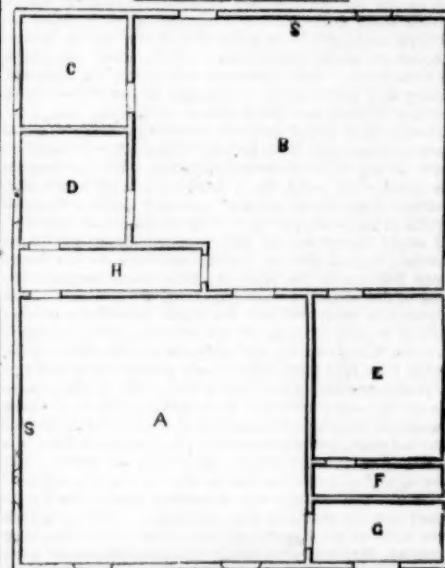
The subject of the chemical preparation of manures is one of such vast importance to the country, and there is so little practical knowledge of the matter abroad, that we are pleased to have an error, whether committed by ourselves or others, promptly corrected. We are glad to learn that our correspondent has succeeded in his experiments in preparing chemical manures, and we hope he will not forget to give the promised account of what he is doing.

Add to this a small lump of unslacked lime, and when it slacks, ammonia will be given off, which will be readily detected by its pungent smell. The whole of his two last paragraphs are both inexplicable and erroneous. I will close this number by giving the following quotation from Prof. Liebig. [The extract, want of room compels us to omit.—Editors.]

I have been engaged for about six months in the manufacture of manure from human excrements; and as I believe I am now making them in the most approved manner, I propose in another number (if it should be deemed of sufficient importance), to give you a short account of what I am doing.

Richmond, Va., Jan. 21, 1842.

GEO. WOODFIN.



PLAN OF A CHEAP HOUSE—(Fig. 35.)

House, 23 by 30 feet—A, parlor, 15 by 15—B, kitchen, 15 by 16—C, pantry, 6 by 7—D, sink-room, 6 by 7—E, bed-room, 8 by 9—F, closet, 2 by 8—G, entry, 4 by 8—H, stairway—S, stoves.

MESSRS. GAYLORD & TUCKER—As plans of low priced houses have not been very numerous in the Cultivator, I inclose one, which you may make use of if you should think it worthy of a place in its columns.

It will be perceived there are two chamber doors; one opening out of the parlor, the other out of the sink-room; they are to swing, especially the one in the parlor, down to the floor, and not in the usual awkward way, on the first step of the stairs. The back kitchen door is calculated to open into the wood-house, where there might be a summer kitchen if circumstances should permit. The other outside door should be protected by a small portico outside; or it may be omitted, and a window placed in its room if desirable.

This is calculated for a story and a half house; but as I know of no particular use in giving side views and end views, I have omitted them altogether. In making the drawing, I have supposed the location to front the south. If it should front the east or north, I would reverse the order of the house; that is, place the rooms on the opposite sides.

CYRUS INGALLS.

New-Hartford, Jan., 1842.

SALMAGUNDI—No. 4.

MESSRS. EDITORS—I was among the fortunate number that attended the late annual meeting of the New-York State Agricultural Society; and so many pleasing impressions were made on that interesting occasion, that I cannot forbear placing them, with your leave, on record. During the whole week in which it occurred the weather was sunny, and the temperature mild and delightful, which caused a large number of the hardy sons of the soil to assemble, and not a few of them from remote parts of the state, which clearly demonstrated the increasing interest felt in that great object, for the advancement of which the society exists. But in the throng, first and foremost, were seen the little Spartan Band which, for years upon years, has met to show to the world, on paper, that the Empire state had an agricultural society. It was sneeringly called a "body without a soul." This was wrong. It was *all soul* and no body; for that indeed it was—the body not yet having been formed and animated with vigor and usefulness. Yes, these indomitable spirits would annually gather together, sometimes twenty, sometimes ten, and again a still smaller number, with heavy hearts, but hopes not yet extinguished. I can fancy them on these occasions, chilled with continued disappointment, perseveringly striking at the flint in order to kindle the fire which would blaze, illumine, and vivify the highways, byways, and remote corners of the state. At length, after very many unavailing trials, one bright particular spark was elicited; it lighted the torch, which was forthwith carried to the legislative halls, where it enlightened and animated its occupants; and the appeal to them to grant fuel that the cheering flame might continue to burn, was successful. With this slender aid, gathering a few sticks here and a few there, they kindled the first bonfire at Syracuse, which illumined far and wide. Another will be kindled at Albany the ensuing fall, which will diffuse a still more glorious light; and yet another at Rochester the succeeding year, and then will this mighty agricultural state, in all its parts, be effectually aroused; and then, too, the era so long devoutly wished by this small but courageous band will be consummated. Are not these noble spirits deserving of more than ordinary honors? Verily, they are. The memories of Van Rensselaer and Buel are already embalmed in grateful hearts; and bright are the leaves which are growing to weave chaplets which will crown the memory of each of this band as he departs. The names of Van Rensselaer, Buel, Beekman, Walsh, Van Bergen, Bement, Rotch, Randall, Grove, Nott, Vail, Allen, and Viele and others, will not, cannot be forgotten in this state, while agriculture holds its station among the honored and necessary pursuits of man.

Like some others, I was disappointed on account of the little competition on *butter and cheese*; but on reflection, not so much disappointed either, when all things are considered. The canal was locked up, the rail-road leading into the interior of the state is prohibited from carrying freight, and there was no sleighing; and consequently, how could farmers, without great trouble and inconvenience, get these articles to the place of exhibition? It was next to an impossibility. But the display was good, very good, for a beginning; and how many thousand great things were of necessity small and insignificant at their beginning. 'Tis the fate of all *enduring and useful enterprises* at the commencement of them; whereas, all that *blow out* are characterized by the Bombastes Furiosus at the start; so none need despond because of the paucity of competitors at the late fair. The competition must and will be larger hereafter; and instead of twenty samples of butter and cheese, we shall have ten times twenty, and perhaps a still greater proportion than that when the society is enabled to enlarge the premiums, and give some eight or ten grade premiums on the same article. In addition, will be the sale of samples, which must attract all the lovers of those two great luxuries, and consequently good prices will be obtained. Let farmers reflect upon this, as well as act upon it, and so limited a display will not again occur.

Not the least among the interesting scenes that I witnessed was the award of the premiums. The recipients were none of your *parlor farmers*, who wear squeaking boots; no, they were the real "froek and trowsers" sort; all grit, workers, practical farmers—the class which I hope will always merit and receive premiums. And is it doubtful that they were very happy? By no means; for I closely marked the countenances of every one of them, and of one in particular, who, after shoving home the real "mint drops," he slapped his hand on his pocket, to be sure that they were safe, and if ever eyes spoke, his did at that very moment. "Will not these yellow chaps make my wife and daughters feel very happy, and proud too?" Yes, his eyes spoke these very words; and they had a just right to feel happy and proud, for better butter never slid over a Virginia hoe-cake, or a Jersey buckwheat slap-jack. There is no denying it; to draw a premium, touches a certain particular spot in a man which tickles most exquisitely. I *know it* to be so.

If I was a little disappointed on account of the paucity of the samples of butter and cheese, I was absolutely so, nay chagrined, at the few reports presented of crops. But the cause of this, undoubtedly, is to be found in the unfavorable season; the drouth of the last summer having been severely felt in every part of the state, which, of course, materially reduced the quantity of every crop; and consequently farmers were afraid, and perhaps ashamed to compete. Nevertheless, some of the crops reported were very large, and hard to bear, the best of seasons, which must have resulted in a good measure from

superior cultivation; and therefore greater is the credit which redounds to those who produced them. But the manner in which the reports were drawn up, with several exceptions, were unsatisfactory, imperfect, and informal, as has already been stated by the chairmen of several of the viewing committees. The suggestion in the report of the root committee, that the Executive Committee draw up blank forms, and publish them in the several agricultural papers in the state, is a good one, which will, I hope, be carried into effect. Correct reports, duly certified, and entering into the most minute details of cultivation, is of paramount importance to promote the grand object of the society; and without this, it must be shorn of half its usefulness. Farmers should know that their reports, no matter whether they are premium crops or not, are to be published in a volume as part of the proceedings of the society; and will not all feel proud to see their names appended to statements which will reflect credit on their skill and knowledge of their profession? If they are ambitious, go-ahead farmers, they will; if not, not. I hope to see 500 of these reports another year, and will try very hard to have one of my own among them.

For the life of me, Messrs. Editors, I cannot keep out of my head that *bonnet*—the beautiful little Manilla bonnet presented before the society; and you must indulge my whim to say something in addition to what has already been said in the amusing and gallant discussion on that occasion. When it was held up to view for our admiration, the inimitable scene of Sir Peter Teazle and the little French milliner flashed upon me; but it soon appeared that it came there *legitimately*. It was purchased of a firm in New-York, and of them it was ascertained that it was the handy work of an ingenious American fair one, and therefore an article of *American manufacture*, which was enough to prompt the patriotic and kind hearted "A. of the North" to purchase it and present it to the society for a premium; or rather its countenance and approbation. A premium of mere dollars and cents, with many others, I objected to then, and would object again and again. Give money to woman as the proof of your approbation when she does wisely and well! 'Ere upon it, gentlemen; you that advocate such a course know little of her nature if you estimate her by such a standard. Nature's great bard of Avon never put the love of money into the souls of any of his imitatively drawn female characters. No, it was a man, or rather a very devil in man's shape, that said "put more money in thy purse;" it was the detestable Iago that said this. Woman's soul in its purity is high above placing value upon "trash which has been mine, and his, and slave to thousands." That which she prizes are the treasures of the heart—the affections—and if we pour these out without stint, she will gather them up and build monuments of kindness and gratitude, which will be seen at every angle and curve of our domestic walks. But thank heaven, the fair one who made the beautiful bonnet was not degraded by giving her money; there were enough of us married gentlemen present to turn the scale aright, and it was therefore decided that she should receive our warmest affectionate approbation as her reward. And if the amiable gentleman who brought this tasteful article of American manufacture before us, conveys it to her in such language as his kindest of hearts will naturally dictate, she will prize it above gold or even rubies. Give plate in the form of tea pots, cream, or sugar cups, or even bamboo cradles, but never money; that they will spend. I respectfully say to the young and gallant general of Rensselaer, right wheel into our ranks, and then he will forbear longer to estimate woman by tens and twenties, but by a higher and holier standard. There, "them's my sentiments."

Another of the very interesting sights witnessed by myself and a number of others, was the stock of Messrs. Prentice, Corning and Bement. And first, that of Mr. Prentice. His are altogether, if my memory serves me right, pure Durham short horns; his beautiful flock—as I understood them to be—of South Downs, having recently parted with to Mr. J. McDonald McIntyre, which I regretted not being able to see. Mr. P.'s barns and stables form, with the gate way, a hollow square; an admirable arrangement to exclude cold winds. The construction and convenience of the whole elicited commendatory remarks from many; and I take the liberty of suggesting to him to furnish a diagram of it for the Cultivator. The stalls were spacious and well littered; and the herd, numbering about forty or more, were in capital condition; and this, with their beauty of form, so characteristic of the breed, made the most attractive scene I have witnessed this many a day. "Nero," whose fame was extended by his visit at the late fair at Syracuse, was there in all his glory; but Mr. P. has another coming on, pure white, name forgotten, which bids fair to eclipse him. Other breeders may look out a year or two hence for an ugly customer at the state fairs. Let all who wish to be either gratified or to purchase short horns, look at Mr. P.'s admirable herd; his urbanity will be sure to please, as well as his stock. A word more. Mr. Prentice is a wealthy, retired merchant; and on a high, commanding eminence, about a mile distant from the city, he has about completed a mansion, imposing for its size, and truly elegant for its architectural taste, where, in the evening of his days, he is hoping to enjoy what the farmer does through a whole life; rural pleasures and happiness. May his hopes be fully realized.

My notice of Mr. Corning's stock must be brief. Mr. C.'s barns and stables are fac similes of Mr. Prentice's. The herd in general showed good keeping, and the breed

is evidently hardy, and calculated to make good workers. "Matchless" was there, and a matchless queen of a cow she is. It was too late in the day to see the flock of Cotswold sheep.

On the following day—and a charming one it was too, for January—I sat out to visit Mr. Bement's stock, accompanied by himself, Mr. H. S. Randall and Mr. Colman, the present editor of the New G. Farmer. Mr. B.'s farm is distant about three miles from the city, in a westerly direction, and the ride to it in the summer season must be delightful indeed, passing on the route many elegant seats in the suburbs of the city. The first thing we were shown was his poultry house and yard, the construction and fixtures of which correspond with the description given by Mr. B. in the last volume of the Cultivator. The fowls were of various breeds, several of which were truly beautiful and new to me, and appeared to be fond of their whereabouts; indeed, we were informed that it was rare to see them out of the yard. This is a proof of good keeping, and this is right; for few things pay better on a farm than a flock of well managed and well fed fowls. He has several varieties of the duck; but the queerest "dickie" that presented itself was a Chinese goose, and what is still more queer, she is now, in mid winter, laying eggs. When told of this, it immediately reminded me of the prolific hen described by the menagerie man. "This," said he, "ladies and gentlemen, is the Siberian hen, which you all know is in New-Holland; she is distinguished for her prolific, spicy and odoriferous qualities; she lays from two to three eggs a day, and Sundays she slides a nutmeg."

The stock of cattle in general looked right, saving a want of flesh, which Mr. B. observed was owing to being overstocked, and are mostly Durhams with crosses, together with several Ayrshire cows, which I thought ordinary in form, but said to be rare milkers, which, in general, seems to be characteristic of that breed. Some of the calves appeared uncommonly fine, and of great size for the age. But the greatest attraction was the pure short horned bull "Astoria," which took a prize at the late fair at Syracuse, and a portrait of which appeared in the Nov. number of the Cultivator. That portrait is correct, except too much swell in the buttocks. Since his trip to Syracuse, he has increased much in size, and his handling cannot be surpassed. Indeed, I know of but one his superior, taking him all in all, and that is the majestic and lordly "Archer," belonging to Col. Sherwood of Auburn. There may be others, however, superior to Astoria besides Archer, but I have not seen them.

Mr. Bement has a flock of about 50 South Downs, and among them were several "crack" animals.

It is generally known that Mr. B. is famed for his superior Berkshire swine, on which he ran away with the chief prizes at the late state fair. His present stock is very attractive, showed good keeping and good management, save in one thing; and this is, want of *litter*. I say, friend Bement, get straw honestly if you can, but get it somehow; for with it you can make manure enough with your piggery to pay for straw at the rate of 20 dollars per ton. It is too bad for farmers, having had the example of the late Judge Buel, and living under the eyes and nose of the Cultivator, and yet setting at naught its precepts. When we bush-whackers visit the establishments of any of our "crack breeders," we expect to see everything in "apple pie order," and the best means adopted to make and save manure. There, I have done scolding. In conclusion, I shall take the liberty to recommend to the admirers of good stock to "look in" at Mr. Bement's, and they will not be disappointed. He has my sincere thanks for his hospitality and attentions, which I shall be very happy to reciprocate.

The address by the worthy and energetic president, delivered at the capitol, fulfilled the estimation in which he has long been held by his friends, as a classical scholar, and an eloquent man. The main subject, although by no means new, yet the manly delivery, chaste language, and well turned periods constituted it a treat rarely participated. But—and was there ever anything of man's creation that had not a little, middle size, or big but to it? No, never. Well, then, but it had *nothing of the practical about it*. This was a great fault, very; and I am by no means singular in making the exception. It was made by all who expressed an opinion in my hearing. Let his successor and successors please note this. It is indeed quite superfluous, at this time of day, to come before an assemblage of farmers, and tell them that their vocation is at once the most dignified and respectable that engages the attention of man; that our paths are scattered with roses and no thorns; that we have much virtue and independence; that we are the nation's body guard in the hour of danger; in short, that we are the happiest fraternity in existence, for we know it already; and not only we, but the lawyers and doctors have found it out, and shown their manners by standing a little back, in order that they "may see just as well." But notwithstanding, it does not signify, Messrs. Editors, we do like to be told the above now and then, especially when told so eloquently as it was by Mr. Nott. Verily, I was so tickled and flattered, that peradventure I had been possessed of a piece of cheese, as was the crow, most certainly like the said crow, I would have dropped it, and the fox would have run away with it. Let our presidents hereafter attempt to instruct rather than flatter us. Farmers are never better satisfied than when reading or hearing *practical knowledge*, if applicable to their profession. The late Judge Buel knew this right well, and he practiced upon it.

There were some capital things said in the speeches

of Governor Seward, Rev. Mr. Colman, General Leland, Alderman Joy, General Viele and others, at the temperance supper, partaken by the members of the society; but my paper is already too long to notice now their sayings; I may advert to them hereafter, for they were profitable to the farmer.

The annual meeting of the New-York State Agricultural Society of 1842, will long be remembered by many others besides myself. There was harmony, enthusiasm, and a determined, *all soul* energy, constituting a sure pledge that it will continue to be, as it already is, the pride and glory of the "go-ahead" farmers of the Empire state.

Laurens, Tompkins co., N. Y.

L. A. MORRELL.

COMMENTS ON THE DEC. NUMBER OF THE CULTIVATOR FOR 1841.

YOUR December number commences with a statement of some accurate experiments made by your intelligent English correspondent—Mr. John Hannam—to prove that it is best to cut wheat some time before it is perfectly ripe. This fact, I believe, is now very generally known to the wheat growers of our own country; at least, so far as relates to wheat which is to be ground. But it is the opinion of the best farmers I have ever known—confirmed (as many of them have told me,) by actual experiment—that wheat designed for seed should be thoroughly ripe before it is cut. Indeed, many assert that it is still better if it be kept a year before it is sown; as it will then yield more grain in proportion to the straw, and be less liable to smut or blight.

In your notice of the Edinburgh Quarterly Journal of Agriculture, you have given some amusing specimens of the truly absurd and ridiculous superstitions of the olden time. But I think we can nearly match them, even in this year of our Lord, 1842. For instance, what think you of farmers who believe firmly in lucky and unlucky days?—in almanacs, as infallible weather prophets?—in the power of the moon to shrink the meat of animals killed during the decrease? and in the blood of a coal black cat's tail, as a sovereign remedy for the disease called "the shingles?" Yet such things certainly are—even in this our day of so much vaunted enlightenment. Would it not then be well if you yourselves, and some of your numerous sharp shooters, would occasionally take a shot at them? Such things, I know, are hard to kill; but there are marksmen among you, I think, who would effect it in good time, if they would only undertake it in earnest. Before, however, I quit this topic, I must do the present generation the justice to say, that the last mentioned superstition is in a great measure defunct. But I well remember seeing, when a boy, a poor black cat nearly as tall as a modern dandy's pony; and upon inquiring the cause of this most extraordinary mutilation, I was seriously told that "it was to get blood to cure the shingles."

YOUR article in favor of agricultural schools is one after my own heart. Indeed, there is nothing I should like better, (if I were well qualified,) than to superintend one, if it were connected, as such establishments always should be, with an experimental farm. Most heartily, therefore, do I approve of every word that you have quoted on the subject from your Alabama correspondent. But he, as well as all other true friends of the cause, may rely upon it, that *never shall obtain them* until the people generally will elect genuine, patriotic farmers and planters, instead of mere party politicians to represent them.

UNDER the head of "Profits of Farming," you have said so much to the purpose, and so perfectly demonstrative of the facts which you aim to prove, that I will not add a word of my own, lest I might weaken its force, farther than to make one most earnest appeal to the sceptics upon this subject, should any be left after reading what you have urged. It is to entreat them—should they still have any doubts—to try—if it be only for one year—to keep an accurate account with their farms, so as to credit them not only with the money which is left after all expenses are paid, but with the account of the expenses themselves, provided they have been paid for out of the proceeds of the farm, together with the value of the bread stuffs, vegetables, and meats consumed by the family, which surely ought to be credited, although it is rarely ever done. No man who would do this, I think, could ever doubt again. None could hesitate to believe that the farmer's life, even as a source of profit, is greatly to be preferred to all others, especially when we take into consideration all its other concomitant advantages.

IN regard to the "state of the laboring classes in Europe," (which is your next article,) I believe it to be quite as wretched as you represent it to be. Indeed, it is far worse, if we may credit recent accounts, particularly in England, Scotland and Ireland. Difficult as it may be to assign all the causes of so deplorable a condition of society, the grand one of all, the source from which the whole of the pitiable sufferings of those classes appear to me to have originated, has been too much interference on the part of their governments between the various professions and callings into which every civilized society naturally divides itself. This has proved the Pandora's box, out of which have issued all the evils incident to such interference; and let our government beware in time, not to follow their disastrous example. But for this, England probably would never have had any corn laws to encourage the extravagance and licentiousness of the rich; never any excess of investments in manu-

factures to make the rich richer, and the poor poorer; and never any such a degree of pauperism as annually to sweep off her thousands by the horrible death of starvation.

THE remedy to prevent weevil in wheat, which is recommended by "The Tennessee Agriculturist," will not suffice, at least, in latitude 37 or 38; for the heat which it undergoes in the stock is not enough to destroy the embryo of the fly contained in the grain. But if that be threshed out as soon as practicable, well cleaned, and thrown into bulk, it will there soon become so hot that no weevil will ever hatch, unless upon the surface of the heap. Care, however, must be taken, if the grain be wanted for seed, not to heap it until it is thoroughly dry, lest its vegetative quality be destroyed.

YOUR remarks on "The Agricultural Fairs of 1841"—on "The New-England Agricultural Societies"—and on the "Fair of the American Institute," are, in the highest degree, interesting to all the true friends of American husbandry; and I sincerely hope they will excite our brethren of the middle and southern states to far greater exertions than they have ever yet made to get up shows and fairs equally worthy of our admiration. I must, however, respectfully offer one objection to the principle upon which most of them offer premiums. It is, that they aim to procure extraordinary products from the land, and marvellous farming stock, without sufficient attention to the cost of production. Whereas, it seems to me that premiums should always be so ordered as to encourage the greatest results which can be produced at the least expense. This would cause our brethren to bestow their attention more equally on all their farming operations, and to study the most economical methods of managing the whole, rather than to give an undue proportion of their care, their labor and means of improvement, to the particular articles for which premiums are offered. In most of these cases, they appear to me—but with all due deference be it spoken—to "pay too dear for their whistles."

I have read with pleasure all the communications of your intelligent correspondent Mr. L. A. Morrell, but must beg leave to make one exception to his universal anathema against sheep's tails. I would save from amputation, if I could, those parts of the broad tail—Tunis and Cape-sheep, as I can assure him that they are great delicacies for the table; and in regard to the narrow tail kinds, I would barely inquire whether it is at all probable, if these appendages are altogether useless? nay, worse; that Nature would ever have made sheep with any tails at all? Why they were made, it is not for me to say; although I really think, in consideration thereof, that since we find them stuck on, we might safely spare to the possessors some 4 or 5 inches.

MR. F. BURT, I perceive, has made another attack upon the National Agricultural Society and its friends, which, to say the least of it, betrays a marvellous ignorance of what these friends have actually said in its favor; considering that (as he asserts) "he has carefully perused all the communications of Messrs. Garnett, Robinson and Gordon, as well as your own." Now I also have read all those communications, and have probably "conjured my brain" about them quite as much as he tells us he has conjured his. But I cannot find a single line, or even a word, to justify Mr. Burt's insinuations about "log-rolling" or "lobbying" with members of congress, although this, I believe, is the second time he has thrown them out against the friends of a National Society of Agriculture. In close connection with these disparaging innuendoes, Mr. Burt introduces one of his discoveries which is at once so novel, profound and important, that the jurists and political economists of our country ought to be forever grateful to him; although I must confess that I cannot discover the least relevancy that it has to the object of his piece. He thus announces it: "My opinion is, that government is constituted for the protection of all; for the favoring of none. Therefore, I cannot see (nor indeed can I,) what right government has to tax me to pay my neighbor a premium, because he has reared a bigger calf than I have." This would truly be a home thrust, a complete demolisher of all the friends of a National Society of Agriculture, had they ever asked government thus to interfere in any such selfish competition. But it so happens that not a solitary man of them has ever, so far as I know and believe, uttered the slightest wish of the kind. No motive therefore can easily be assigned for the introduction of the above opinion, unless indeed it was to prove that Mr. Burt's knowledge of government was quite equal to his knowledge of all other subjects upon which he undertakes to write. Let me give you another quotation to illustrate his comprehensiveness of acquirement. He says—"If I understand the Smithsonian legacy right, it was left to the government to establish a national university." Now the will itself bequeathes the money to erect within the District of Columbia an institution which was to be called "The Smithsonian Institute," which, according to the express words of the will, was to be—"an establishment for the increase and diffusion of knowledge among men." Whether these words mean a "national university" or not, I shall leave it to others to determine. To others also I will leave to decide, whether an agricultural school, wherein all the numerous sciences connected with agriculture would be taught, and an experimental farm on which the pupils would be instructed in all the most approved practices in husbandry, would not well fulfil the intentions of Mr. Smithsonian, as far as they can be understood from the language of his bequest.

Mr. Burt's comparison of the National Society "to one of the double geered thunder shower saw-mills that go to kill," may be very witty and appropriate, for ought I know to the contrary, having never yet seen one that went "to kill" anything. I must therefore plead ignorance of its applicability. I am equally ignorant of what he can mean when he talks of government furnishing funds to keep up the society; unless, indeed, he con founds, with his usual alacrity at such work, the Smithsonian legacy with these funds; although it no more constitutes any part of them than his own private property. But even if the legacy really belonged to the government, not a cent of it will be asked to support the National Society of Agriculture. It is solely to support an agricultural school and farm that the friends of the society will seek to obtain it. Mr. Burt, it seems, could not conclude his attack upon this society without verifying the old proverb—"in for a penny, in for a pound." Witness his contemptuous remarks on all other societies of the kind throughout our country. But pity it is, for his own sake, that he had not kept to himself the anecdote of Dr. Franklin's, telling Thomas Paine that—"he who spits in his own face, spits against the wind."

COMMENTATOR.

CORN—SOUTH AND NORTH—JUDGE BUEL.

MESSRS. GAYLORD & TUCKER—I have had the pleasure of reading occasionally a valuable sheet published at Columbia in South Carolina, called the "South Carolina Temperance Advocate and Register of Agriculture;" and in that paper of the 6th of January, I notice a communication signed D. on the subject of corn. From this, with your leave, I propose to make a few extracts, and append a few remarks. The text on which the writer hangs his communication, is an estimate by Judge Buel in the Cultivator, volume 1, page 38 and 9, (and also in his Farmers' Library,) of the quantity of corn that will grow on one acre, when planted in rows or drills, at different distances, of which distances and modes of planting he gives examples. After copying Judge Buel's table (in which the third method, as printed in the S. C. T. A., is incorrect, as it should be 3 feet by 2½, instead of 2 feet by 2½,) and describing the manner in which the results as to quantity were gained, "D." adds, that his object is to persuade a former correspondent of the Carolina paper, "not to suffer the arithmetical chimeras, and useless theories of Judge Buel (or any other man who is so ignorant of corn planting as to suppose that an acre of ground could be made to produce 170 bushels—plant it as he may,) to bother his brain, so to make him lose another crop. As for the calculations of Judge Buel," he says, "I regard them as of no sort of practical utility to farmers. For the Judge never saw nor heard of even 75 bushels of corn being obtained from one acre; much less, 170." * * * "The second method quoted will give 75 bushels 2 pecks and 4 quarts, which no lands that Judge Buel ever owned, ever did or ever will produce." * * * "I would ask Judge Buel, when before did it enter into the imagination of men to plant corn as thick as his last, or even his third method (3 by 2½ feet) proposes to plant it? Who, that ever cultivated an acre of land in corn, does not know that corn planted according to his 6th, 5th, or ever 4th methods, would not only have no corn at all, but the stalks themselves would literally burn and shrivel up, during the best seasons we have, in any kind of land, however rich?" * * * "For Judge Buel's benefit, therefore, as well as that of my friend C. C., I will give the result of my experience in the method of planting, hoping it may do no harm if it does no good. Corn planted in rows 3 feet wide and drilled 2 feet, is thick enough for any land; and if it is a dry season it is too thick; but if seasonable, and plowed four or five times, (only one way) and hoed once or twice, good land will produce a gill, or perhaps a gill and a half to the hill. If one gill, there being 7260 hills in one acre, it will yield 29 bushels, 3 pecks and 5 quarts, which is enough for any man to make from one acre. If, however, the land is not so strong, I would always prefer planting 4 by 3, which will make 3588 hills, and have one stalk in a hill, which, in an ordinary season, will yield fully 2 gills to a hill, and a better grain than if the stalks were thicker, which would give 28 bushels; quite enough for common land, well manured."

My object, Messrs. Editors, is not to defend the character of Judge Buel, as an agriculturist, from the flip-pant attacks of men so profoundly ignorant of the state of agriculture in the country as "D." evidently is; he cannot need such defence; but I wish to invite attention to the difference between what is considered a good crop at the North and in the South. We at the north do not consider 29 bushels as much as a man ought to make from an acre; and the man whose corn crop does not very greatly exceed that quantity, is thought, and deservedly, a miserable farmer; and I trust the time is very distant when the northern farmer will think 28 bushels "quite enough for common land well manured."

Further; "D." says Judge Buel "never saw or heard of 75 bushels of corn from an acre; much less, 170." I make the following extract from the Cultivator, volume 1, page 39. "The 5th method, [one of those which D. so positively affirms would produce no corn-at all,] I have tried. The ground was highly manured, and the crop twice cleaned. The entire acre was gathered and weighed accurately the same day. The product in ears was 103 baskets, each 84 lbs. nett, and 65 lbs. over. The last basket was shelled and measured, which showed a product on the acre of 118 bushels, 10 quarts." In the same place reference is made to the premium crop of

the Messrs. Pratts of Madison county, of 170 bushels per acre. What will be the nature of the emotion felt by every one who knew Judge Buel, towards the man who could make the reckless assertions quoted from "D." or what name shall be given to the assertions themselves?

"D." asks when it ever entered into the head of a man to plant corn 3 feet by 2½? I answer; corn is so planted every year in multitudes of instances at the North. I planted it myself in that way last season; and notwithstanding the severe drouth, got more than 60 bushels to the acre; and in the same way have frequently had from 70 to 80 bushels per acre.

The only mitigating circumstance in the paper of "D." is to be derived from his evident ignorance. The man who does not know that Judge Buel long since descended to the grave, universally revered and lamented, cannot be expected to know much of the agriculture of the United States. The truth clearly is, "D." knows nothing about the culture of corn at the North. He is ignorant of our soil, our climate, our varieties of corn, our methods of planting and cultivating; and he deems any deviation from the standard adopted on the worn out sand plains of his state an impossibility. "D." I trust, is one of a number which is daily decreasing in that section of our country. It cannot be there are many planters in the South who think that 28 bushels per acre of corn is enough, when that quantity may easily be doubled. The excellent journal from which I have quoted is proof to the contrary; and before the citizens of our broad country undertake to assert so dogmatically what can and what cannot be done in another part of it, a little acquaintance with facts, and the state of things there, would seem to be desirable.

AN ONONDAGA FARMER.
Onondaga County, N. Y., 1842.

POTATOE OATS.

EDITORS OF THE CULTIVATOR—I have been requested by several respectable gentlemen concerned in horses, to call the attention of farmers to the bad quality of potatoe oats for horse feed. They state that a very large portion of them pass through the animal undigested; so much so, that their horses began to decline very much in flesh while feeding on them before the cause was suspected. They say that the chaff covering the grain is so firm and impervious that digestion is impossible. I cannot agree with them in the cause of the evil, however correct they may be in their observation of the evil itself, which I of course do not doubt. We all know that all kinds of oats, as well as other grain, will pass through the horse unchanged, unless it be crushed by the teeth; as nature has provided all grain with a skin that the juices of the stomach cannot dissolve. If, therefore, more of the potatoe oats pass undigested than of other kinds, it must be because of their being more difficult to masticate. Whatever be the cause of the evil, however, the evil itself cannot be questioned; consequently, no one that keeps many horses here, or at least, no one that I have seen that pays proper attention to them, will now purchase potatoe oats at any price. I have consulted several, and they all concur in opinion. The purchasers of forage for the army horses here will not purchase them at all. I have therefore thought it advisable to caution farmers against their cultivation.

Baltimore, Feb. 1, 1842.

G. B. SMITH.

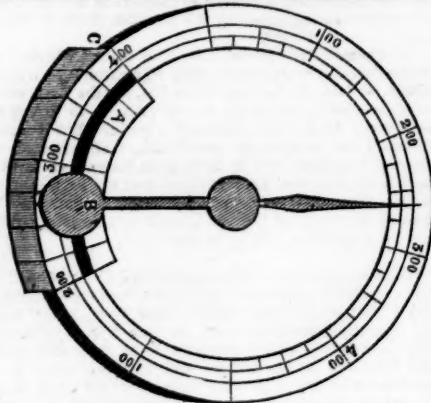
VALUE OF AGRICULTURAL PERIODICALS.

THE value of the sciences as applied to agriculture, the necessity of a more extensive diffusion of intelligence among farmers generally, and the importance of agricultural papers as a means of promoting an improved husbandry, are things so universally admitted by all whose opinions are worthy of notice, that we have long since ceased to occupy the pages of the Cultivator to any extent, with papers relating to these topics, as they may be considered settled, and beyond argument. At the request of a friend, however, we give place to the following extract relating to the subject before us.

"But methinks I hear some one say—'I never thought there was much to be learned from books and papers about farming. Those that write on the subject know very little about it in my opinion. They are not practical farmers; they never used a plow or hoe in their lives; their theories may appear well enough on paper, but you can never reduce them to practice. In fact, sir, I have not much opinion of book farming.' But to such a one I would say—Friend, you are, I fear, prejudiced. Go and subscribe for the Cultivator one year, and my word for it, you will alter your mind; and if you don't get the worth of your money, make the fact known to the publisher, and I am sure he will refund the same. An examination of the papers from some three or four hundred contributors, will show that a vast majority of the writers are practical farmers, and speak from their own personal knowledge. And not only to such an objector would I say—subscribe for an agricultural paper, but I would say to all engaged in the business of farming—go and do the same. Think not that you know all that is necessary to be known on the subject of agriculture. Seek to be successful, and eminent in your profession. Look upon it as not only most pleasant and useful, but also most honorable. Make farmers of your sons. Imbue them with a love for rural pursuits. In short, use every means in your power to improve yourself in your profession, and elevate the standard of agriculture throughout the land."

West-Hartford, 1842.

X."



DYNAMOMETER—(Fig. 36.)

A, a slot pierced through the dial plate to correspond with the division on the opposite side, of from 2 to 400 lbs. traction. C, a drawer sliding under the dial, divided into cells corresponding with the pointer on the dial plate. B, a cup, containing about a cubic inch of sand in the form of the upper half of an hour glass, with a close cover.

The working part of the instrument to be constructed in the usual form; its extreme action to be from 0 to 500 lbs. upon a half circle. When prepared for operation, the cup being filled, the pointer would stand at 0, and the cup at 500; the sand would consequently be retained until the resistance of the plow brings the sand cup to 200 or more, when it would continue to empty itself in the cells corresponding with the number of pounds draft exerted; like the hour glass, it would discharge itself in a given number of minutes. The drawer being taken out, the quantity of sand in the graduated cells would determine the average quantity of power expended.

The trial should be made with the same team attached to all the plows to be tested, and upon the same description of soil, and driven by one person, and at the same speed.

MESSRS. GAYLORD & TUCKER—I am far from being convinced that we have as yet arrived at the right form and construction of that most important of all farming implements—the plow.

The Scotch plow or some of its congeners are, in my opinion, nearer the truth for greensward plowing than any other now in use; but their unwieldy form renders them objectionable to many of our countrymen, partly from prejudice, and partly from the stumpy and uneven surface of our newly reclaimed lands.

There is but one form of the operative part, that is, strictly speaking, just and correct; and that form is the one that will perfectly invert the furrow with the least expense of power.

In passing through our farming country from Georgia to Maine, you can hardly find one form of plow to prevail for a greater distance than one day's travel. Almost every community, especially if they happen to have a foundry in the neighborhood, have some form peculiar to themselves, and frequently of the most absurd and unphilosophical construction; and yet they all have their users and apologists, who will die in the last furrow to maintain that they are the best in the world, from ignorance of better kinds, and from the *esprit du corps* of particular communities.

It strikes me that this important point can be settled without a very great exertion of personal attention or mechanical ingenuity.

It is unfortunate that horses are not gifted with the powers of speech, or their owners would be better advised upon the subject of the variable draft of different plows.

A span of horses will draw a body out of a well (by a rope traversing a pulley) weighing from 10 to 1400 pounds. The power required to perform ordinary greensward plowing varies from 250 to 400 pounds; a required power so much less than the power of the team, that the faulty construction is not so apparent to the driver as it would be if the rate of power was greater; consequently, a body of that weight descending into a well would cause the plow to perform its required task.

The form of the plow should vary with the quality of the soil, the speed of the team, and the kind of work required to be performed. A tender clover ley requires a form of moldboard of slacker twist, or more elongation, than the firmer and more tenacious greenswards; and cross plowing may be performed with a short moldboard, that cannot do good greensward work. An ox team can do good work with a moldboard, that a quick team would entirely fail to perform; and I think it must be admitted that the best greensward plows are not the best for cross plowing.

For more than 20 years past, my attention has been particularly called to the construction of the cast iron plow, from having been engaged in the foundry business; and having early introduced the article among the farming community, and during the existence of the former law patronizing agricultural societies, I constructed a dynamometer for the use of the Saratoga society, where I then resided; from the trials of which, I became convinced of the difficulties in the way of settling

with anything like accuracy, the different degrees of traction required to perform the process of plowing with the various articles experimented upon.

The instrument being attached between the motive power and the resisting body, it has to be observed while in motion, and the variable resistance from roots, stones and inequality of surface, render the index so fluctuating that it is next to an impossibility to arrive at any satisfactory conclusion. It was remarkably exemplified at the trials at the state fair at Syracuse, as the committee engaged in that service will freely admit.

Since I have had the honor to preside as the president of the Monroe County Society, I have been so repeatedly called upon to endorse the things of various constructions, that I am more and more impressed with the necessity of having some unerring test of their qualifications.

At the suggestion of our friend Solon Robinson, (from whom I had the pleasure of a call on his return to his log cabin at the Far West,) my attention has been particularly turned to the construction of a self-registering dynamometer, that shall of itself give a true average final result of the required power to turn a given width and depth of furrow in any soil, with any speed, and with any plow.

How I have succeeded you will be enabled to judge by the drawing (fig. 36.) I herewith inclose, with a description of its construction and operation. If you think it deserving an engraving, you may thus dispose of it, or you may subject it to the examination of the principal officers of the institution, and other competent judges.

L. B. LANGWORTHY.

Handford's Landing, Monroe Co., N. Y. 1842.

ON EARLY HARVESTING OF WHEAT.

I am much surprised to perceive that your correspondent, (John Hannam, Esq.) should claim the advantages gained by cutting wheat in a green state to be a recent discovery, for I remember hearing when I was a little boy, (say twenty-five years ago,) farmers speak of its being advantageous to cut wheat previous to the time of its having arrived at what some people call maturity; and I know, from personal observation, that in the East Riding of Yorkshire and the North of Lincolnshire, as long as twenty years ago, a person allowing his wheat to stand until it was dead ripe, would have been considered to possess very antiquated notions of farming. I can, however, add my testimony to Mr. Hannam's that the practice of cutting wheat in a raw state, is attended with a favorable result. The cause of my noticing this subject, was to caution such of your readers as may adopt the practice of cutting wheat in the state recommended, against binding it in large sheaves, as in such a case I will infallibly mold in the center of them. I have known persons who have sustained great loss from this cause, and I have known others commit the great error of leaving it laid in the swath, by which means the sap contained in the straw is suddenly dried up, and the grain being thus deprived of its support, becomes lean and shriveled. The best plan is to form it into small sheaves as soon as it is cut, and be careful not to bind them so tight as to prevent the air taking effect upon them.

I am, yours, &c.,

J. HARLAND.

ON REARING CALVES.

MESSRS. GAYLORD & TUCKER—D. B. C., in the first number of ninth volume, wishes information on the treatment of calves for the butcher or for rearing. I do not say I know the best way; but from some experience I can inform him of a good one: for the butcher, I let them take all the milk they will from the cow (and if one does not give enough I give them more) till they are five or six weeks old, keep them in a close dark place, clean and dry, and they never fail of being good. For rearing, I take them from the cow soon after they are dropped, and feed them new milk two or three times the first weeks. I then set my milk from morning till night, take off the cream, boil potatoes or beans and mash them fine, and put with the milk with very little salt. I feed them with that food till they are twelve or thirteen weeks old, when I begin to wean them by reducing the quantity, at the same time put a trough in their pasture where I put dry oats, and they soon learn to eat them; one pint per day each through the summer. In the fall, or first of foddering time, I feed them that mess morning and evening. Through the winter, feed hay, corn fodder, oats in sheaf, and when the weather is not extremely cold, give them a few potatoes, carrots, or turneps, with plenty of clean water and salt, and be sure to protect them from all inclement weather. In the spring, I turn in pasture with other cattle—no extra care. My heifers never fail to come in at two years old as large as my neighbors' are at three; be the feed what it will, feed plenty. If my cattle from any cause get troubled with lice, I have a remedy I have never seen in the Cultivator. I keep a box with fine dry sand in my barn, and if I discover any lice on them I put it on from back of the horns the whole length of their back a few times; it has never failed to effect a cure. It may be observed that cattle, or any animal that has free access to the ground, are seldom troubled with lice in summer. If you think the above remarks worth notice, they are yours. I have used many words to convey a few ideas, but I could not make them plainer with less. I have been for several years a careful reader of your paper, and surely I have derived much benefit from what I have learned from others' experience.

Glen's Falls, Feb. 14, 1842.

LEWIS NUMAN.

LETTERS FROM MR. PETERS—No. II.

London, January 1, 1842.

MESSRS. GAYLORD & TUCKER—As too much cannot be said upon those subjects, which are of the first importance to the farmer, I shall confine my remarks to what more particularly relates to the agricultural interest.

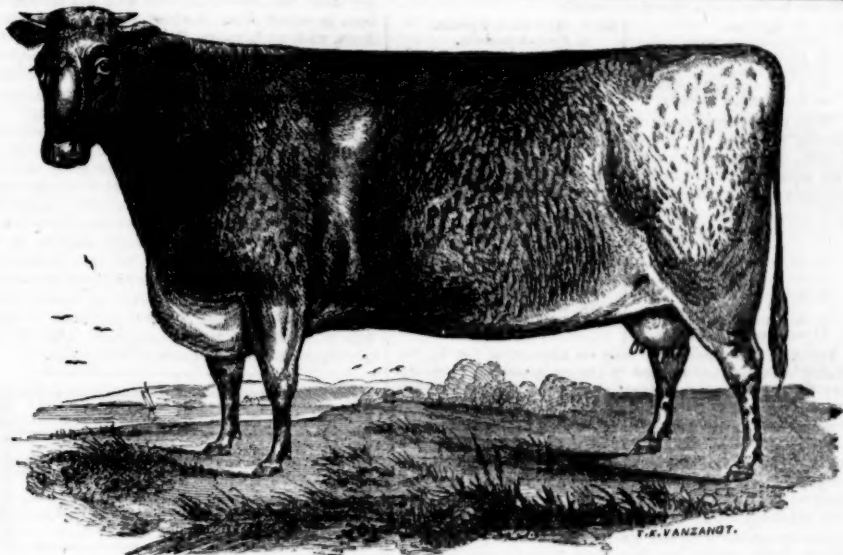
I have been to-day, for the second time this week, through the warehouses, examining butter, cheese, lard, beef and pork, from various parts of Europe, the United States, and from every place almost in the kingdom. Every facility was given me for a thorough examination of every kind; and nowhere in the world can be found a greater variety than here.

I saw tons of American cheese that is not worth the duty, owing to the bad condition it is in, from a want of proper knowledge as to the best method of putting up for a voyage. Out of the immense quantity I examined in these stores, I am sorry to say very little will pay the shipper a profit. Unless one has seen the different kinds, and tasted them over and over again, been among the retailers, and seen the kinds they sell at best prices, he cannot form any idea of the great defects in our cheese. We have, however, one thing to console us. Those defects can be easily remedied with care; and we can send into this market cheeses as good in every respect as the best here. Our cheese must be uniform in size, and of a different, and I think better proportion. As I remarked in my last, ours are too flat or thin, according to their weight. No cheese should be made of less thickness than 6 inches. Great care should be taken to press them well, and to cure thoroughly, so that the rind will be thick and tough. Cheshire cheese is yellow. It is colored by rubbing down on a stone some annatto, about one ounce to the cwt. of cheese, and mixing with the milk while warm. It is usually rubbed into the milk through a linen cloth. The temperature of the milk when set for the curd is from 90 to 96° Far. If too cold, the curd is soft and retains its whey. If too hot, it is hard and tough. No person should attempt to make cheese without a thermometer. It is of the first importance that the cheese in the dairy should be as uniform in size, taste, and appearance as possible. Some of our dairies are not surpassed by the best here; but there is in general a great lack of uniformity; and the taste and size is almost as various as the dairies. It is no merit to say that we possess every requisite to equal the whole world in the perfection of our butter and cheese. We must do it; and what is more, we will do it. The time is not distant, thank Heaven, when our sons and daughters will think it quite as important to be able to make good cheese or good butter, as to play well upon the piano. And the conversation of the parlor will not only be about the latest fashion, but also the best method and latest improvements in butter and cheese making. The time has gone by for the American woman to be the frivolous, useless toy that an erroneous system of education has heretofore made her. Her destiny is a high one; for upon her, in a great degree, depends the future prosperity of our country, and the perpetuity of the republic. But excuse this short digression, if so it can be deemed.

Butter may at some time become an article of export; but it must be the very best. You meet in this market every shade of quality. The best fresh butter comes from Holland, Ireland, and the interior. The best Dutch butter is slightly salted, and is not intended to keep long. It is usually sold during the first week after its arrival. Their very best butter, however, is not better than some I have seen from Orange county, and Goshen in Connecticut. Indeed, I have eaten as good butter at farmers' tables in New-York, Pennsylvania, Ohio, Indiana, Michigan, and Illinois, as the very best made in this or any other country. What the few farmers have done, the many may do if they will. All that is requisite is care and labor.

The best salt butter is the Kiel and Irish. The Irish is considered the best. The Irish owes its superiority to the care taken in the inspection. They make five different sorts; and it is put up in packages of from 70 to 80 pounds. The butter which they export to foreign countries is in pickle, and will keep in good order for a long time. In Ireland the butter dealer furnishes the farmer with the firkin, and it is filled at the farm. The coopers use none but the most thoroughly seasoned oak timber for making up the firkins. If well seasoned, they say there is no danger of any woody flavor being imparted to the butter.

Their method of making butter I think worthy of adopting by our farmers. The milk is churned generally; and long and careful experience and observation has shown that, all things being equal, butter made from churned milk will keep much longer in good condition than that made from churned cream alone. I should recommend that method, by churned milk, to all persons keeping small dairies, or where the cream was not churned daily. The milk is strained into pans at night, and stands till morning. It is then put into stone jars, and so divided that the jars will hold three milkings. The morning's milk is put in at night, and the night's milk again in the morning. The whole is occasionally stirred with a thin, flat stick until it has become thoroughly curdled. It is considered best when it commences curdling at the bottom. The whole is then put into the churn, and churned with a rapid motion. The temperature of the milk is quite important; as if it be too cold or too warm it froths very bad; and warm or cold water must be added, as circumstances may require. The proper degree of temperature could be ascertained by a little practice. Churns are worked by steam, by sheep, dogs, and donkeys, and the necessary machinery is put up



MOSS ROSE, AN IMPORTED SHORT HORNED COW,

OWNED BY EZRA P. PRENTICE, ESQ., MOUNT-HOPE, NEAR ALBANY.

THE above is a very correct portrait of Mr. Prentice's "Moss Rose," one of the four cows imported by him in October last, from the yard of Mr. Whitaker, Yorkshire, England, and was there valued at 100 guineas.

Moss Rose is a beautiful roan, four years old last spring, and though of fine form, is chiefly remarkable for great substance, with very light bone and offal. She came out, stunted to the "Sir Peter," a son of the "Sir Thomas Fairfax," by "Porcia," and calved on the 11th Jan. last. The produce is a red and white bull calf,

from which Mr. P. has high expectations, justified alike from its appearance and pedigree.

Her sire was "Barden," 1674, 3d vol. *Herd Book*.

Dam, Viola, by Young Collins,	1843
G. D. Viola, by Remus,	550
G. G. D. Pink, by Sudbury,	1424
G. G. G. D. Beauty, by Hollings,	2131
G. G. G. G. D. Lingeroppper, by Partner,	2409
G. G. G. G. G. D. Lady, by Mr. Hutton's bull	2145
G. G. G. G. G. D. Lingeroppper, by Marak,	418
G. G. G. G. G. G. D. Lofty, by R. Alcock's bull,	19

at a very small expense. The butter when taken from the churn is washed in clear spring or well water until all the butter-milk is washed out. It is then worked over, and salted according to the season and the market. The best salt is that kind known as the "Liverpool stored salt," which is very fine and dry. It is, however, made as fine and uniform as possible by rolling it on a table with a paste, or rolling pin. It is not considered fit to put into the firkin until it has stood a week or so, and been thoroughly worked over at least twice. Every particle of butter-milk is worked out. I consider it essential that cows should also have free access to salt.

I hope our farmers will turn their attention to this subject; as hundreds of thousands of dollars could be saved to them annually by a very little more care and attention in this one article. Let them try the experiment. The course pursued by some of the best dairies here, and which has been crowned with complete success, is certainly worthy of our serious consideration. Let us once get in the right way, and it will then be not only profitable but pleasant to go-ahead.

If I have been tedious, you must lay it to my anxiety to do good to the great interests of our country.

Sincerely yours,

T. C. PETERS.

EXPERIMENTS WITH SALT.

MESSRS. GAYLORD & TUCKER—I with pleasure comply with your request, and give you the detail of my experiments in the use of salt as a manure. In the spring of 1838, we broke up 6 acres of sward land that had been mowed a number of years, intending to plant it to corn, but observed when plowing that the ground was infested with worms; (the yellow cut or wire worm, and black grubs;) as we had mostly lost our corn crop the year previous by having the first planting almost entirely destroyed by the corn worm, (above described,) we expected a like calamity would follow the present year, unless some preventive could be used to destroy the worms. And having frequently and unsuccessfully used all the recommended remedies to destroy the corn worms, we were induced, at the suggestion of an English laborer, to try salt. After the ground was thoroughly harrowed, 5 bushels per acre was sown broadcast, leaving a strip of near half an acre on each side of the field, to satisfactorily test the experiment. The whole was then planted to corn and potatoes. The corn on the part where no salt was sown was mostly eaten up by the worms, and was replowed and planted to potatoes. The potatoes on the whole lot were a good crop, but decidedly better where the salt was applied. I regret that we did not ascertain by measurement the actual result. There was a very perceptible difference in the appearance of the vines during the whole summer. On the part where the salt was sown they grew larger and were of a darker green color, and continued green longer in the fall than the others. In the spring of 1839, we spread on a good coat of manure and planted it all to corn, except about half an acre of the salted land, which was planted to Rohan potatoes. The Rohans were the best crop of potatoes I ever saw. Seed planted—24 bushels, produced over 300 bushels. The largest potatoe weighed 4½ lbs. The corn was a heavy crop, but was not measured. The summer was very dry

and hot; but the corn on the salted land did not appear to suffer at all from the drouth, while the other was considerably injured. The salted land appeared always moist, and the growth of everything upon it was very rapid. We found great difficulty in keeping the weeds down. After three successive hoeings, we were obliged in August to give it a hand weeding. Spring of 1840, intended to have stocked the land down for meadow; but thinking it too rich for oats, planted potatoes without manure. Crop good. The effects of the salt still very apparent: Adjudged to be one-third more potatoes where the land was salted.

Spring of 1841, sowed a part of the lot to oats, the remainder to potatoes and onions without manure. The onions were a great crop. The summer was very dry, but they did not suffer, while other crops in this neighborhood on similar soils were nearly destroyed by the drouth. The oats were a heavy crop, and much lodged on the salted part. The clover grew well and produced a fine crop of fall feed. This I cannot account for, except by supposing that the salt kept the land moist, or attracted moisture from the atmosphere, as I know of no other piece of land in the town that was well seeded last year; it was almost an entire failure; and the most of the land stocked down last spring has been, or will be plowed up in the spring to be re-seeded.

We sowed salt the same spring on a part of our meadows. The grass was evidently improved, the result satisfactory, and we shall continue to use it on our meadows. I shall not at this time force upon your readers any opinions of mine respecting the manner in which salt operates beneficially upon vegetation or the soil. The following quotations from English authors, if you see fit to publish them, will show that the subject is not a new one; and perhaps your readers may glean some information from them.

In Europe much has been said and written to prove and to disprove the utility of salt as a manure. Without entering at all into their ideas of the *modus operandi*, we may judge from the effects of experiments. I may say, however, that it has been supposed beneficial in small quantities, by its tendency to promote putrefaction, and injurious in large proportions, because it then exerts its antiseptic powers. It has been supposed of benefit by destroying snails, grubs, moles, &c., in the ground.

"It is observed by Dr. Darwin, that as it is a stimulus which possesses no nourishment, but may excite the vegetable absorbent vessels into greater action than usual, it may in a certain quantity increase their growth by taking up more nourishment in a given time, and performing their circulations and secretions with greater energy. In a greater quantity, its stimulus may be so great as to act as an immediate poison on vegetables, and destroy the motions of the vessels by exhausting their irritability. The reports of experimenters on the use of salt as a manure have been as different as the soils on which their trials were made; owing, in some measure, to causes which can never be foreseen or controlled, and on which agricultural experiment so generally depends. In sandy soil, salt has been found to exert effects superior to eight out of ten of the best manures. A quantity of ground was prepared and divided into beds of forty yards in length by one in breadth. The beds

were then sowed and manured by the following substances in the quantities mentioned:

- | | |
|-------------------------|-------------------------------|
| No. 1. No manure. | No. 7. Malt dust, 2 pecks. |
| 2. Salt, half a peck. | 8. Peat, 3 bushels. |
| 3. Lime, 1 bushel. | 9. Decayed leaves, 3 bushels. |
| 4. Soot, 1 peck. | 10. Fresh dung, 3 bushels. |
| 5. Wood ashes, 2 pecks. | 11. Chandler's graves, 9 lbs. |
| 6. Saw dust, 3 bushels. | |

With the exception of chandler's graves, salt was decidedly the best of those used. On a trial of compounds, the combination of salt and soot was the best. The substances were mixed in the following order, and the same quantity of each employed as when used singly:

- | | |
|-----------------------------------|---------------------------------|
| No. 1. Salt and lime. | No. 8. Salt and saw dust. |
| 2. Salt, lime and sulphuric acid. | 9. Salt and malt dust. |
| 3. Salt, lime and peat. | 10. Salt and peat. |
| 4. Salt, lime and dung. | 11. Salt, peat and bone dust. |
| 5. Salt, lime, gypsum and peat. | 12. Salt and decayed leaves. |
| 6. Salt and soot. | 13. Salt and pearl ashes. |
| 7. Salt and wood ashes. | 14. Salt and chandler's graves. |

Perhaps this superiority may be accounted for by the quality of saline substances to attract moisture from the air; for those beds where salt had been used were visibly and palpably moister than the rest, even for weeks after the salt had been applied; and the appearance continued until rain fell, when of course the distinction ceased. In several instances the crop of the land failed altogether, except on the part where the salt was applied.

In Hindostan and China, all the land on the coast is regularly treated with sea water; and they depend solely on this management for the increase and goodness of their rice crops. In Poland, salt is extensively used in the tillage of the land.

Many valuable communications on the use of salt as a manure have been made to the British board of agriculture. I may be allowed to mention two further experiments made on this subject.

To show the effects and advantages of salt properly applied to vegetables, the gardener of Lord R. Manners made the following experiment in an extreme dry summer upon a bare piece of pasture land, out of which the cattle had been taken for want of grass. He marked off four places, each of which was watered for nine successive nights in the following manner: the first with one gallon of spring water; the second with one gallon of the same water, containing one ounce of common salt; the third with the same quantity of water and two ounces of salt; and the fourth with the same quantity of water and three ounces of salt, which gave the following effects:

The grass in the second place grew more abundant and of a darker green than in the first; in the third place it grew only by spots; for part of it was killed where the greatest quantity of water fell; and the fourth was quite killed, for a greater compass than the third; by which it appears that an ounce of salt in a gallon of water had a better effect than the water alone; and that three ounces of salt mixed in a gallon of water was more than the grass could immediately receive; but the fourth place, in the ensuing spring, was the most fertile of them all.

The other experiment I shall notice is related by Dr. Holland, well known by his agricultural survey of Cheshire:

"After draining a piece of sour, rushy ground about the middle of October, he ordered some refuse salt to be spread upon a part of the land at the rate of eight bushels to the acre, and in another part sixteen bushels. In a short time vegetation disappeared totally; and during the month of April following, not a blade of grass was to be seen. In the latter end of the month of May a most flourishing crop of rich grass made its appearance on that part where the eight bushels had been laid. In the month of July the other portion produced a still stronger crop. The cattle were remarkably fond of it; and during the whole of the ensuing winter, (which is ten or twelve years since,) and to this day, the land retained and yet exhibits a superior verdure to the neighboring closes."

Schaghticoke, Feb. 8, 1842.

JOHN C. MATHER.

COUNTRY DWELLINGS.

MESSESS. EDITORS—I lately received a letter from HENRY W. TAYLOR, of Marshall, Michigan, in which he says:

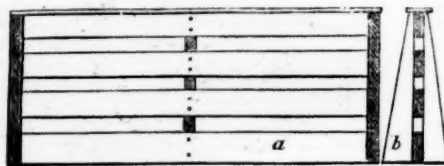
"Having been in a somewhat unsettled state for some time past, I had neglected to take the three last volumes of the Cultivator, which I procured lately to make my set complete. Should I build here, as I have now some intention of doing, I should consider your hints as to building, on the 59th page of volume 6, as of value to me far greater than the whole cost.

"I have been gratified with many of your other communications. There is a great deficiency in the design and adaptation of country dwellings in all our country. The same expense which is now incurred, if combined with architectural skill and good taste, would add doubly to the comfort of the great body of the people. I am glad to see that the Cultivator is becoming more and more interested in this great appliance to human comfort and happiness. In a country like this of Michigan, especially where all is new and fresh, and the taste and design of the present will probably govern for many years, not to say generations to come, it is greatly to be desired that a correct and sound judgment should prevail. It would be acceptable, I think generally, if the contributors of the Cultivator would devote a portion of

that paper every month to this great neglected subject; and when not furnished with original matter and drawings, to select from the best English and American authors, such as Loudon, Robertson, Downing and others. Perhaps a hint from you might bring about such a change."

Schenectady, Feb. 26, 1842. D. TOMLINSON.

We find most of the plans of farm buildings given in foreign works, unsuitable for our country. They are not only too expensive, but their arrangements are not such as are needed by our farmers. Unfortunately, very little attention has as yet been given to this subject by our own architects, and we know of no source from which to obtain such plans of farm buildings as are adapted to the wants of American farmers—those, we mean, who wish neat and tasteful dwellings, varying in cost from \$1000 to \$3000; and we shall be glad to receive designs for such buildings, together with barns and the other outbuildings necessary to complete an establishment suitable for farms of one to two or three hundred acres. The plans should be accompanied with the necessary specifications and estimates of cost.—Eds.



IMPROVED BOARD FENCE.—(Fig. 38.)

MR. CULTIVATOR—Annexed hereto, I hand you a rough sketch of an improved mode of making board fence; and as it is on a plan entirely new, and perhaps not known to many, if indeed to a single individual, among your numerous army of readers, I take the liberty to send you a description of it, in the hope and belief that it may prove interesting if not instructive to them.

The boards are 14 feet long, and of such width as is generally used in constructing the common board fence. The posts are not set into the ground, but upon the ground, or rather upon a flat stone placed for the foot of the post to rest upon. The posts are made of oak plank two inches in thickness, and twenty inches in width, and four feet six inches long; these planks are split with a saw diagonally, commencing at one end two inches from one edge, and running out at the other end two inches from the opposite edge; thus making two posts, each eighteen inches wide at the bottom, two inches wide at the top, and two inches thick. These posts are now placed edgewise to the fence, and the boards are nailed to that edge, which forms a right angle with the bottom end; one post upon one side, the next upon the other side, and so on; the ends of the boards are joined to each other upon alternate posts, or by breaking joints, which adds to the strength of the structure. If a temporary fence is wanted, however, or one which is intended at any time to be removed or changed, then each length of 14 feet may be constructed complete in itself and independent of the rest, as represented by fig. 38, a. They may then be removed with very little trouble from place to place.

This fence occupies but little more ground than the common post and board fence, and is far superior to it in point of durability. Every one of your readers is aware how liable the latter is to be swayed out of shape by the action of wind and frost, and that but few years are required to decay that part of the posts under ground sufficient to let the fence down; while the posts of the improved fence, not being in contact with the earth, will last as long as any part of the fence. A strip of board five inches in width is nailed upon the top flatwise, which covers the whole and protects the upper ends of the posts from the weather; and if a good coat of paint is then added, it will stand a good chance to outlast the builder.

In the hope that your readers will be able to comprehend the plan from the above sketch and description, it is respectfully submitted to their notice and consideration.

a, represents a side view of one length of 14 feet. b, an end view, showing the shape of the posts.

Castile, Wyoming co., N. Y. 1842. J. HORSFIELD.

THE AYRSHIRE CATTLE.

MESSESS. GAYLORD & TUCKER—I find by your November number of the Cultivator, that A. B. Allen, Esq., of Buffalo, has returned from old England, and informs the readers of the Cultivator that they can make the Ayrshires here, by the thousand, by crossing Durham bulls on our best native milkers. Sir John Sinclair, Mr. Aiton, the duke of Montrose, and many other superior judges, esteem the Ayrshires as the very best dairy stock; yet they are of doubtful origin, and the most discriminating breeders do not agree as to their true origin. Some go so far back as 1740, to the herd of the earl of Marchmont; some ascribe to the Dutch cows imported by Mr. Dunlop, much to establish the present race of Ayrshires; while others think the Teeswater breed have done much towards producing the now existing, and much celebrated breed of Ayrshires. But why should we longer doubt their origin, when A. B. Allen, Esq., of Buffalo, has informed us how we can produce them by the thousand? If Mr. A. had ever perambulated the shires of Ayr, Lanark, Renfrew, or Sterling; or had he rambled among the farmers of old Monk-

land, Barony, Bothwell, or Cawdor; or had he spent but one afternoon, wandering along the banks of the Clyde, he would have seen many of the poor man's cows, as the Ayrshires are often called, and would never have hazarded the assertion that we can breed them by the thousand, and in the way proposed by him.

Is Mr. Allen well informed, as to the success of Col. Jaques, of the Ten Hills Farm, near Boston, in breeding Ayrshires in the very way proposed by him? The Col. has succeeded in getting up a stock he calls the Cream-pot breed. They are as much like the Ayrshires as a wild boar of the island of Mocha is like the improved Berkshire boar, Windsor Castle. (I have not seen Windsor Castle, but well know the old Berkshire mark, and I like the buff or sandy flecking.)

I will not apply to Mr. A. B. Allen the language that Festus did to St. Paul; but I will say, I fear a little experience as a breeder, and a little trip to England, has had a bad effect upon him.

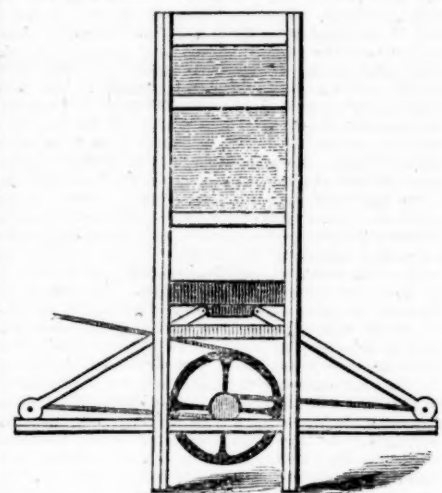
In a few words, I will say to Mr. A. B. Allen, that he may as well attempt to engraft the black currant bush into the nose of the living sturgeon, and have it to produce fruit in all parts of the Hudson river, as to produce the pure Ayrshires in the way proposed by him.

I would not deter any one from crossing the best Durham bulls on our best native milkers. I would encourage it, and should expect an improvement.

It is much to be desired, that all persons writing for agricultural journals should give to the readers of those journals facts, and nothing but facts, on all subjects on which they write, and have no guess work.

New-Bedford, Feb. 5, 1842.

GEO. RANDALL.



VAN HOSEN'S PRESS FOR HAY, &c.—(Fig. 39.)

MESSESS. EDITORS—The above cut is an illustration of the patent lever railway press, lately invented by Wm. C. Van Hosen, of Catskill, Greene county, state of New-York. The frame and box of this press are like those now in use. It will be seen by the cut, that the lower panel is left out to show the follower or moveable bottom of the box with the end of the lever attached thereto. At the lower ends of the levers will be seen friction rollers, with a flange on each side to keep it on the track of the railway. Attached to the lower end of the levers are ropes or chains which are drawn in by the roller or shaft of the armed wheel. Upon the rim of this wheel is placed a rope, to which a horse may be attached, or carried to a capstan which is preferable; it will be seen by drawing in the lower ends of the levers, the follower is elevated, carrying up with it the article to be pressed; and when the greatest power is required, it is given without any additional draft of the horse. The portion of this press giving the power being made of wood is not so likely to break or get out of order as those made of cast iron. The travel for a horse in running up a bale, if attached to the rope on the arm wheel of 5 feet diameter, is 100 feet. If attached to a capstan, it is increased according to size of capstan and length of lever. While in a screw press, the travel is one mile and a half in running the screw up and down.

This press excels all others now in use for pressing hay, cotton, wool, rags, &c. &c., and will be warranted to perform well and do double the work that a screw press can with the same number of hands, with less than half the draft. A small boy can attend the horse, and the running back of the follower with perfect ease. The time required in running up the follower is about one minute. Six bales have been pressed to the hour with ease. Bales weighing over 300 pounds have been pressed by one man.

The construction of this power is such that it does not require a building expressly for it, as it may be placed in any barn or shed, and the horse may move in any direction or at any distance from it; and when the bale is ready for delivery, it is discharged instantly, and the follower gradually recedes as the hay is placed in the box.

The construction of this power is so simple that any man can make one or keep it in order. For a small expense it can be applied where the screw is now in use, and save much barn room and horse flesh.

There are several of this new style of press now in

use in Greene county, and others building in different parts of the counties of Greene and Columbia. One may be examined at the residence of the inventor, Leeds, Greene county, and one at the farm of Judge Cooke, Catskill. The latter is sunken through the threshing floor, and the horse travels outside of the barn.

W. S. JACKS.

Catskill, March 5, 1842.

IMPORTATION OF STOCK.

MESSRS. GAYLORD & TUCKER—No person knows the true value of good stock unless he enters into the improvement of it with a determined spirit to equal any one, and then he finds from experience there is no end to it; the more warmly he pursues, the more highly he is gratified. The nearer his stock advances to perfection, the more care and judgment is required to keep them up; and no one knows the pleasure that proceeds from this care, but the real and scientific breeder. His thoughts, his reflections, and his attention are all called into active and pleasing research; and from this, he finds there is much to learn, and much to overcome. He is laughed at by the ignorant, contradicted by sceptics, "abused" by smatterers, and envied by the wealthy and "would-be-great." And why is this? Because, while constantly inventing plans to improve the body of the beast, in true hearted earnestness, he has faith in doing a good action. It adds value to his mind, and brightens it to mightier thoughts for the benefit and happiness of his noble station; for such a man must stand above. And if I may say it without presumption—the good, thorough, practical breeder and tiller, when rightly known as such, deserves the highest title under heaven. He adorns the earth beautifully and substantially, and is the foundation of useful and interesting knowledge.

Well do I remember ten years since how many "old fashioned farmers" in England ridiculed and "abused" the better bred ones for their spirit and enterprise, who will not then be persuaded to go out of their beaten track, but now see it in a very different light; but it was "ocular demonstration," and the proof of their neighbors' prosperity that weaned them from it.

If a person gave one hundred and fifty guineas for a bull, either Hereford or Short Horn; or from fifty to eighty guineas for a ram, either Cotswold or Leicester, he was by them considered "a down right fool" for his pains. The bigoted old farmers would meet together at the village public house, or on market day, and over their pipe and pot would go as far as to call him a common enemy, and scandalize him accordingly, because he was injuring their sales. They would go home to their family circle "half groggy," and cunningly admonish their sons against this extravagance, who had probably been ("out of patience") driving their diminutive stock to several different fairs without sale or chance of it, at an expense each time; while buyers would come to the houses of their neighbors who had better bred ones, cheerfully give the best price, and rejoice at their bargain. I have many times seen cattle and sheep bred in the same parish, on exactly the same sort of soil, kept in the same manner, fed and sold at the same age, and to the same butcher; the mongrel cattle would go from fifteen to twenty pounds each, while the better breeders' (for which the demand was great), went from twenty-five to thirty-five. The mongrel wethers, at two years old, would not fetch more in market than the good breeders' tegs at fourteen months. "These ignorant knowing ones" would read the market prices, and find "course and inferior beasts" selling from three and two-pence to three and fourpence per stone, (of eight pounds to the stone,) when the prime quality fetched from four and sixpence to five shillings; making thirteen pounds, fifteen shillings difference (in the beef only) in the lowest and highest price, with a beast that weighed one hundred and fifty stones.

These circumstances, and many others plainly visible, at length opened the eyes of those who exclaimed against the expense of good sires. They found that worth was worth; and that their produce would repay it with interest and profit. Those who were so much prejudiced against giving such high prices for them, now spur on an auction with as much spirit as the "best;" and instead of calling such men fools, follow their example in everything, and acknowledge their own deficiency; and they found that prices grew larger, as better breeders became more numerous. When I see this, as I have done, I say I see a noble feeling at work; and it is my "deliberate opinion," that good sires and dams, both of the Herefords and Short Horns, will always be in good demand, and at very high prices; the more they are known, the more they are appreciated.

I purchased the Hereford bull, Major, of Mr. Wm. Hewer. Had he lived, he would have been five years old this spring; he has taken seven first prizes at the different agricultural societies, viz: Hereford, Farringdon, and Cirencester, from a calf to the best bull of any age, contending against some of the best Herefords and Short Horns each time. He won as many first prizes of his age as any bull in England; and I have heard it remarked by many of the "best" judges, (some of them Short Horned men,) that he was as good a bull as England could produce. This I readily believe, and would have given my "last shirt" to have saved his life; for I think his loss is a very heavy one to this country. His offspring, two year olds and yearlings, are getting nearly as conspicuous as he; two of each within the last two years have taken the first prizes at Cirencester, against many of the first breeders, both of Herefords and Short

Horns; and I trust as they grow older they will give the "best" a hard race to conquer.

Major lived forty-two days on the vessel, amidst adverse winds, storms, and waves the most terrific; the last fifteen on nothing but what I gave him from a bottle. On the banks of New-Foundland he was committed to the deep. If one of my best friends had gone, I could not have felt more. I had anxiously watched over him night and day. No person could have had more attention; but all was useless; his hour had come. Such trials as these are designed to develop a noble spirit; therefore I must not give way, but try again. I have one consolation; we have four yearling bulls, six two year olds, and two yearling heifers got by him, quite as promising as those I saw in England. I never saw the waves roll higher, or the wind blow harder, for thirty days in succession. And our long tried, experienced, and worthy seaman, Capt. E. E. Morgan, who has crossed the ocean 106 times, says he never had such a boisterous voyage. We had one wave strike the vessel, which shivered the bulwarks and galley, and upset the main boat. Had such a wave struck the wheel of a steamer, it must have disabled her; or had my stock been there, where I had previously carried them, they must have all been swept away. In the course of these trying storms, I lost Major, Cleopatra, (a four year old Short Horn cow—as good a one as I ever saw,) eight Leicester and three Cotswold ewes; they were worried to death by the continued rolling of the vessel. Venus, a four year old Short Horn; Columbus, a Short Horn calf, and the rest of my ewes stood the test well, and have improved much since the storms have ceased. I brought Cleopatra and Venus on purpose to show against those Mr. Allen is going to receive from his "one breeder." Although I have lost the best, Mr. Hillhouse has Wildame from the same herd to take her place. Therefore, spirit and courage must keep up and doing.

The Messrs. Hewers' annual sale of rams last year averaged, with the rest of his sales, £17 17s. 6d.; one sheep making one hundred and sixteen guineas, or \$880. And one of their wether tegs, fourteen months old, weighed fifty and a quarter pounds per quarter. This was without his head or caul; according to American weight would have been about 236 pounds. This teg was shown dressed at Stow fair, May the 12th, 1841.

There is now a fair and spirited contest between the Herefords and Short Horns, and time only will prove which are "the best." The former have taken every one of the first prizes for fat oxen at Smithfield show this year.

The best breeds of Herefords and Short Horns never have been higher than at the present. The demand is greater the more they are known; and I do assure you the "best" are far better in England, although not confined to "one breeder."

I would publish another very interesting letter from the "Earl" of Warwick, were it not for the ill natured criticisms of some of your correspondents. However, I will make some extracts from it in another communication. Though I do not fear it myself, I will not bring my friends under the lash of the literati.

WM. H. SOTHAM.

Ship Hendrick Hudson, March, 1842.

CULTURE OF THE POTATOE.

MESSRS. EDITORS—I this year planted about four and a half acres of the potatoe. The ground was a heavy sward, some part of it formerly quite wet; but drained last year, turned over late in the fall, subjected to the frosts of winter, and in the spring harrowed on the furrow without disturbing the sod, until sufficiently loose for planting. My Rohans last year pleased me so much that I determined to make my principal crop of them; but on the same ground I planted for table use the May-duke and white kidney for early potatoes, and the pink eye and Mercer for winter use, together with samples of several other varieties as an experiment, and some three-fourths of an acre of the Sardinia potatoe for the purpose of comparison with the Rohan. About three acres were Rohans. Part of the Rohans, with the early kinds, and those for experiment, were planted about the 20th of May; but the planting of the remainder of the Rohans, and that of the Sardinias, was not completed until the 9th of June. The severe drouth of the summer seriously affected the crop, nearly preventing some of the late planted Rohans from vegetating at all; and as the whole were on the top of the sod, they probably suffered more than they would had the turf been rotted more thoroughly. As it was, I obtained about 750 bushels; the Rohans first planted producing at the rate of about 200 bushels to the acre; while the late Rohans and Sardinias were about equal in productiveness. My experience this year, as heretofore, has gone to prove that the chances for a crop of potatoe are much increased by planting as early as the ground is in a fit state for their reception. There was no curl among any of the varieties grown this year, though it appeared among some of them last year, and although other farmers in the county have suffered much from that disease in their crop this season; but the roots were much injured by the wire worm; they seeming to find sustenance or harbor mainly in these.

I wish to mention here one circumstance respecting the potatoe crop of this year, which has come directly under my observation, and which, though inexplicable by me now, may hereafter help to explain the total and singular failure of Mr. Guthrie's Rohans last year. My Rohans succeeded so well last year that several of my farming friends were disposed to try their culture; and

among others, T. Cowles, Esq., a careful and accurate farmer, took half a bushel. They were taken from the same bin in the cellar as those I planted, and at the same time; and were cut and planted on the same day he received them. As an experiment, and to test their comparative productiveness, they were planted with Sardinias on one side, and Mercers on the other; the length, number of rows, and number of hills, being the same. The Sardinias were planted whole; the Mercers cut like the Rohans. From the first coming up the Rohans seemed a failure; and while the tops of the others were vigorous and flourishing, there was scarcely a handful of vines on the whole of the Rohans. A few days since, he put into my hands the following statement of the crop at digging: Mercers, 17 bushels; Rohans, 1½ bushels; Sardinias, 18½ bushels. The explanation of such a total failure I leave for the reader to make.

Otisco, Dec., 1841.

H. M. GAYLORD.

OPERATION OF SPAYING.

MESSRS. GAYLORD & TUCKER—I have just read, in the Cultivator for this month, your mode for performing the operation of "spaying." A different mode is practiced in this neighborhood, at least by one operator, which in my judgment has some very important advantages over the one recommended by you. Instead of the incision being made "between the four back teats," it is made in the side. The operator provides himself with a bench or plank about a foot wide, elevated sufficiently to enable him to work easily, standing in an upright position. The animal is laid on the plank on her side, (usually her right side;) a leather strap is then passed under the flank and over her body, just behind her fore legs, and buckled down tight enough to hold her still; her head and hinder legs are held steadily by a couple of lads; and the operator, standing at her back, makes the incision in her side or flank, just between and a little below the hip and the short ribs. The balance of the operation is the same as that recommended by you. The advantages of this over your mode are the following: the suspension of the animal by the hind legs, which must be painful to it and prejudicial to its health, is avoided; the operation is less dangerous, and the animal being more steadily confined, there is less probability of the operator doing mischief from the contortions of her body; it is more speedily accomplished, and the ovary more conveniently reached, and easily excised; and the wound, being not so much exposed to subsequent injury, heals quicker; and the enlargement of the belly, caused by careless spaying in your mode, and consequent rupture, to which there is great liability, are entirely avoided. This practice has been used among my stock for the last five years with entire success. I have never lost a single animal from spaying, or had any disfigured, since this mode of operation was introduced on my farm.

J. W. CRISFIELD.

Princess Anne, Md., Jan. 13, 1842.

A PRODUCTIVE FARM.

MESSRS. GAYLORD & TUCKER—In your number for February, 1841, you take notice of a farmer named Thomas Oliver, within a short distance of Edinburgh, leasing for the last 20 years a farm of 150 acres at £10 10s. per acre, and renewing his lease for another term of years, which in Scotland is 19—not 15 years, as you state; and that from a poor man, Mr. Oliver has become rich.

Mr. Oliver's farm is peculiarly situated, and thereby possessed of advantages seldom falling to the lot of farms. It is distant about two miles from Edinburgh, and about the same distance from the sea. Through a considerable part, the common sewers from the southern districts of the metropolis are conducted by one ditch; from this, small canals are cut to every part of the farm, low enough for the water to flood. These canals are stopped or dammed up at intervals, whereby the ground is flooded with liquid urate and pondrette; when it is thoroughly soaked, the water is turned off that it may dry. A thick stock of very succulent grass springs up. This portion of his farm Mr. Oliver lets off by public auction every spring to the cow keepers, who supply Edinburgh with milk, in lots from one-fourth of an acre and upwards. The price per acre varies every season. It has been let as low as £20; and has brought £50. The medium is from £30 to £40 per acre.

In forward seasons they commence cutting the first week of April, and continue doing so until 15th November, when the term of possession expires.

Mr. Oliver has no trouble, farther than to employ a man to keep the canals clear, flood the ground regularly, and turn the water off when the ground is sufficiently irrigated. The grass is cut every third or fourth week, and causes a great flow of milk.

Mr. Oliver has several shallow ponds at the lowest corner of his farm. Into these the water is turned during winter, and deposits a rich sludge or mud. In the spring these are dried, and the manure, which is very rich, carted off to his fields, and the surplus sold at a high price to the neighboring farmers.

Mr. Oliver is a scientific farmer, of liberal education, and was a candidate with Mr. Low for the chair in the University of Edinburgh, now filled by the latter gentleman. Before he entered into possession of this farm he was in easy circumstances. These he has no doubt improved by his successful farming.

From the same source several thousand acres between Mr. Oliver's farm and the sea are also enriched, yielding

equally heavy crops of grass, managed and sold in every way the same. And on the sea beach a large tract, that formerly consisted of sand hills, yielding only a few stunted furze bushes, has been leveled within a few years, canals cut all round, sown with grass, and now yields grass equal to any grown on Mr. Oliver's farm, and makes a handsome annual return to the proprietor.

I have been thus particular, not knowing but some farms in the vicinity of some of your cities may possess equal advantages as Mr. Oliver, without the proprietor being aware of the riches he is allowing to go waste.

Ascor, Lower Canada, Jan. 15, 1842.

SCOTUS.

REPORT ON FARMS.

We omit some communications already in type, to make room for the following interesting Report of the Onondaga Co. Ag. Society's Committee on Farms and Farm Crops, just received:

The committee would respectfully report, that the number of farms which they were called to examine was small compared with the number which will probably hereafter be offered in this county, when the attention of the farming community shall have become more awakened to the subject of agricultural improvement.

Your committee were first invited to examine the farm of Silas Gaylord, which is beautifully situated on the west bank of Skaneateles lake, and about four miles south of the village. This farm contains 145 acres, 25 of which are covered with wood. The 120 acres are all arable land, and suitably divided into fields, on which is pursued a course of crops. A large share of the western part of this farm was formerly so wet as to be unfit for tillage. This Mr. Gaylord has very properly reclaimed by underdraining, which is a very profitable operation on lands which are so moist as to be otherwise untillable. Twelve hundred rods of stone underdrain are already constructed on this farm. The buildings are well located and in good repair. The out buildings are extensive and convenient, especially the barn, which is very large, with cellar, shed or stabling, under the whole of it. This your committee believe is a great improvement, as it requires no additional roof and furnishes a place where stock can be kept comfortable in the most inclement weather, a convenient cellar for the preservation of roots, and a place for preserving manure from the great waste attendant on exposing it to the storms of winter and spring.

The farming tools are in good order, under cover and ready for use. The fences mostly in good order, and a large share made of posts and boards. The fields are generally in good order, and few weeds are allowed to perfect their seeds. All vacancies in the timber land are filled by transplanting locust trees, which are taken from a nursery on the farm. By thus keeping the locust tree shaded, Mr. Gaylord thinks he shall avoid the depredations of the borer. The stock on this farm consists of 33 neat cattle, all of which are full blood or grade Durham, 4 horses, 15 hogs, and 74 sheep, of the improved English varieties. The division of the farm the present year with the quantity of crops is as follows:

Wheat, 18 acres, 400 bushels.	Corn, 5 acres, much injured by wire worm.
Barley, 10 do. 300 do.	Meadow, 30 acres, 60 tons.
Peas, 5 do. 100 do.	Pasture, 45 do.
Oats, 5 do. 200 do.	
Potatoes, 2 do. 300 do.	

The farm of Mr. Gaylord exhibits the practical good sense and untiring industry of its owner, and is well worthy of a visit from those who are designing to raise stock or erect the out buildings which are necessary on a stock farm.

Your committee were next called to view the farm of Fletcher Woodward, situated on the turnpike, five and a half miles west of Syracuse. This farm contains 236 acres, 225 of which are under improvement; all tillable and in a high state of cultivation. This farm is naturally adapted to the raising of grain, and to this Mr. Woodward gives most attention. The course of crops which is produced is: 1st, corn or potatoes, on a clover lay, then oats or barley, which are followed by wheat, after one and sometimes two plowings; then sows 8 quarts of clover seed, 2 quarts of timothy seed, and 3 to 4 bushels of plaster per acre on the wheat early in the spring, and pastures one year after the wheat is harvested. Mr. Woodward sows from one and a fourth to two bushels of wheat per acre, according to the time of sowing; prefers sowing from 10th to 15th September. Never sows grass seed with any crop but wheat; general average of wheat crop per acre, from 20 to 27 bushels; has raised 48 bushels per acre on small pieces. Corn is invariably raised on green sward, with one plowing, harrowed down smooth, and struck out both ways; rows north and south, 3 feet 4 inches, east and west, 2 feet 8 inches apart. Plants early in May with plenty of seed, coated with tar, and thins at hoeing to 4 stalks in hill; plasters as soon as up, and again after second hoeing; uses the cultivator, hoes 3 times, and makes very little hill.

Barley is generally sown on pasture land with one plowing; general crop 30 to 38 bushels per acre; sows from 2 to 2½ bushels per acre. Oats are cultivated after corn; sows 2½ to 3 bushels per acre; general crop 50 to 50 bushels per acre.

Mr. Woodward's method of cultivating potatoes is to draw at the time of threshing wheat, (with a pair of horses and rope,) the straw, and deposit it in large bunches on a clover lay, leaving a narrow strip all around the field on which no straw is put. In the spring this narrow strip is plowed and harrowed fine. Then drops the seed once in two feet each way, covers about one inch

deep, and keeps the surface as near level as possible. He then takes the straw adjoining this circle, around the field, and deposits it evenly on the ground already planted, to the depth of about 4 inches when settled together. This leaves another strip for plowing, which is treated in the same manner as the first, and so on, until the crop is ready to harvest, which is usually from 300 to 500 bushels per acre. This farm is divided into fields of the average size of 23 acres. The fence consists of 963 rods of posts and boards, 215 rods of full wall, and 180 rods of half wall, all in good order. For the convenience of passing these fences, 33 gates are already hung, and the committee were informed by Mr. Woodward that he had contracted for 22 additional gates to be erected this fall. The quantity of produce raised on this farm the present season is as follows:

Wheat, 88 acres, 1760 bushels.	Barley, 25 acres, 760 bushels.
Corn, 20 do. 1460 do.	Potatoes, 5 do. 1500 do.
Oats, 33 do. 1320 do.	Meadow, 10 do. 20 tons.
Injured by drouth.	Pasture, 47 do.

The stock kept on the farm consists of 12 horses, 28 neat cattle, 83 hogs, and 150 sheep.

Mr. Woodward has given a practical illustration of the fallacy of the idea which is so often advanced, that the farmer cannot afford to be nice in his farming operations, and that the profits will not pay for an outlay of extra capital in improving the soil and fence. One of the committee asked Mr. Woodward if he took an agricultural paper, to which he replied—"I do, and have for a number of years, and have found it of great use. And could I have had the Cultivator, with the present light upon the subject of farming, when I first commenced, (18 years since,) I think it would have been more than \$1000 benefit to me."

The farm of Mr. Woodward exhibits in a favorable manner the beneficial effects of what is denominated the new system of husbandry. The antiquated customs of farming which our forefathers followed, are not so dear to him as to cause him to shut his eyes to the improvements which modern agriculturists are annually making in the science of farming. He is not so fearful of being denominated a theorist as to refuse to try the improvements which are recommended in those publications; and his farm shows the consequence; it being well fenced, well cultivated, very productive, and very clear from weeds, none of which are suffered to seed. In short, everything shows that the operations on this farm are directed by an enterprising, intelligent, practical farmer.

Your committee were next called to examine the farm of Hiram Church, situated in the town of De Witt, 2½ miles northeasterly from Syracuse.

This farm contains 137 acres, about 100 of which are under improvement, and all suitable for tillage. It is divided by a good cedar fence into fields containing about 10 or 12 acres each. The produce of this farm the present year is—

30 acres wheat, 679 bushels.	1 acre potatoes, 150 bushels.
4 do. corn, 200 do.	12 acres meadow, 24 tons hay.
6 do. oats, 360 do.	22 do. pastured.
3 do. peas, 75 do.	22 do. summer fallow.

Mr. Church prepares his ground for wheat mostly by summer fallowing, plowing three times. His method of raising corn is much like that pursued by Mr. Woodward, except Mr. Church uses a small plow instead of a cultivator; consequently he makes some hill around the corn.

The stock kept on this farm consists of 9 neat cattle, 7 horses, 10 hogs, and 60 sheep. Mr. Church makes liberal use of clover seed and plaster, and this practice your committee would earnestly recommend to every farmer.

The farm of Mr. Church is newly improved compared with the farms of Mr. Gaylord and Mr. Woodward; but is naturally choice grain land, and we doubt not with the industry and enterprise which Mr. Church exhibits, it will soon show such a degree of neatness, and amount of produce as few, if any, farms can now exhibit.

Your committee also examined a field of corn containing 9 acres, cultivated by H. Fancher on the farm of Fletcher Woodward and in the same manner as reported by Mr. Woodward. It was well cultivated and would yield more corn per acre than any other field on the farm of Mr. Woodward.

Royal White of Onondaga called the attention of the committee to a field of wheat containing 4 acres and 52 rods, which Mr. White informed us yielded 167 bushels of wheat. Method of cultivation—broke up about the middle of June about ten inches deep, and immediately harrowed. Plowed and harrowed again the fore part of August. Plowed and harrowed the third time the 10th of September, and immediately sowed with 7 bushels of Canada flint and white flint wheat. Three-fourths of an acre of this piece of land was sowed with peas, and was plowed but twice.

Col. W. Abbott, of Otisco, presented a fine sample of spring wheat which he originated by a series of experiments from the bald flint, which is a well known variety of winter wheat. For an account of his experiments we would refer to page 138 of volume 9 of the old Genesee Farmer.

The committee would here state the quantity of produce which is given in this report, is in part given from ascertained facts and partly from estimates which the committee believe to approximate near to correctness.

The committee recommend that the first premium on farms be given to Fletcher Woodward. The second to Silas Gaylord, and the third to Hiram Church.

They also recommend that premiums be awarded to H. Fancher, Royal White and Warner Abbott.

The committee would further remark that they have had a pleasant duty assigned them, and they regret that the number of competitors was not greater.

The committee would also return their thanks to the different competitors for the kindness and hospitality with which they have been treated.

All of which is respectfully submitted.

ENOCH MARKS,

WILLIAM FULLER,

} Committee.

Syracuse, September 29, 1841.

PITTS' IMPROVED BEE HIVE.

MESSRS. GAYLORD & TUCKER—Permit me, through the medium of the Cultivator, to call the attention of those who feel an interest in bee keeping to an examination of Pitts' improved hive.

The object of the improvement is to protect the bees from destruction by the bee moth, and other external enemies. The plan adopted by the inventor is very simple, and costs but a mere trifle, and has, so far as it has been used, proved effectual against the ravages of that wily and destructive insect—the bee moth. The hive is of the most easy and plain construction, consisting only of a simple box, set upon what is denominated the protector; and the bees are permitted to work on what is called the subtended plan, that is—when one hive is filled with comb, it is raised up, and an empty box or hive is set under it, with holes through the top board or cover of the box, through which the bees will descend and take possession of the lower hive, leaving the top hive with its contents to be taken away by the bee master at his own convenience, whenever circumstances will permit. By the adoption of this plan, there is no necessity for killing the bees to get their honey; and they are, in addition, provided with sufficient space below to always work downwards; which is in accordance with the natural habits and instinct of the bee.

To work bees on the subtended plan is not a novel idea. It has been adopted in France and Germany with the best success; and is also practiced by many apiarists in our own country, as the simplest, cheapest and most successful method of working bees that has as yet been recommended to their attention. The hive left at your office is of the usual size, and combines the whole improvement. In constructing the protector, the natural habits of the bee moth has guided the inventor, and enabled him to protect the bees from the worms or larve of the moth after the eggs are hatched. The miller or moth that lays the eggs which produce the worms, enters the hive for the simple purpose of depositing them in the vicinity of food adapted to the wants of the worm, before it is transformed into a winged insect—the real bee moth. The miller will of course be as well satisfied to lay its eggs in any other aperture immediately connected with the hive, offering equal accommodations to the young worms. The facilities offered the moth to pass into the protector in preference to going into the hive, are in such proportion that the moth will seldom, if ever, find its way in among the bees. The protector is easily kept clean of the worms without disturbing the inmates of the hive, and provides complete ventilation when the entrance to the hive is closed up.

Albany, March, 1842.

H. A. PITTS.

WORCESTER PLOWS.

MESSRS. EDITORS—When in the city a few days ago, I was invited by Messrs. Prun, Wilson & Vosburgh, to step into their store, in State-street, and examine some plows, cultivators, &c., which they had just received from that well known establishment at Worcester, Mass., of Messrs. Ruggles, Nourse & Mason, who, I am informed, have appointed the above firm their agents for the sale of implements in this city.

I congratulate the farmers in this vicinity on this acquisition, and would recommend them to call and see for themselves before they purchase elsewhere; for I am fully persuaded that on an inspection of the plows, they will be convinced of the superiority of their construction; that they are far superior to anything of the kind we have had heretofore; and from the well known character of the establishment from whence they were sent, I am confident they will not be disappointed in the performance of their work, strength, and durability. They are not like "Pinder's razors—made to sell," but are made to perform well when sold. The first performance of plows that I had ever seen from the above establishment, I witnessed in October last at the plowing match of the Berkshire agricultural society, where I officiated as one of the committee to award premiums, and out of eighteen plows that started, three were of Messrs. Ruggles, Nourse & Mason's manufacture; and it is a singular fact, that notwithstanding these plows were all entirely new, and in the hands of persons who had never seen one of them until the day previous, two out of three premiums were awarded to the plowmen that used these plows; and they had to contend against Chamberlin's plows which had always been successful heretofore, and the plowmen accustomed to them.

I also noticed a small swivel plow for the purpose of plowing in grain, and which could be used also for a corn plow if necessary. There were other kinds, but I have not time to particularize them now.

Farmers, call and look at the plows; you will find Messrs. Prun, Wilson & Vosburgh polite and attentive.

C. N. BEMENT.

Three Hills Farm, March, 1842.

The Garden and the Orchard.

ORNAMENTAL TREES AND SHRUBS.

HAVING already given some notice of those trees and shrubs more particularly adapted for ornament in winter, I propose to mention some of the finest which are natives of this country, with a few of the more common exotics, whose chief beauty is exhibited in the summer season. Anything like a full enumeration is of course out of the question here.

Among native forest trees, the elms and maples are conspicuous. The common sugar maple is well known as one of the finest shade trees. The black maple, (*Acer nigrum*), is less known; it exceeds the sugar maple in denseness of foliage, and in richness of appearance, and is perhaps, as an ornamental tree, inferior to none. The red or scarlet flowering maple, (*A. rubrum*), found chiefly in swamps and wet places, is distinguished by its scarlet blossoms which appear early in spring, and by its glaucous leaves, which roll up in fine silvery masses in the wind.

The American or white elm, (*U. Americana*), everywhere more or less abundant, is conspicuous for its graceful form, and when large, for its magnificent appearance. The *Ulmus racemosa* is of larger and denser foliage, but otherwise inferior in beauty to the former.

The oak is very justly considered as one of the most majestic and picturesque of forest trees, and may be largely introduced in all plantations of much extent. The species are too numerous to mention here; but among some of the most common and handsome natives are the white oak, (*Quercus alba*), black oak, (*Q. tinctoria*), scarlet oak, (*Q. coccinea*), remarkable for its brilliant scarlet leaves in autumn; swamp chestnut oak, (*Q. prinus*), and rock chestnut oak, (*Q. montana*).

Among other of our forest trees may be named, as more particularly worthy of attention, the linden or basswood, distinguished by its large, dense foliage, and conical form; the white ash, by its broad, round head, and lightness of foliage, and by its dark purple hue in autumn; the American aspen, by the lively green of its early leaves, and their constant tremulous motion in the breeze; the chestnut, resembling the oaks in general character of expression; the tulip tree, (*white-wood*), belonging to the natural order of the magnolias, and resembling them in its large, rich and glossy foliage, and stately growth; the catalpa, conspicuous for its broad leaves, its loose, spreading growth, and large panicles of beautiful flowers in summer; the shell-bark hickory, for its compact and handsome form, and dense foliage; and the black walnut, remarkable for a softness of foliage combined with massive boldness of form. Most of these are of the largest size, and are best introduced in extensive grounds, and sparingly in smaller.

Some of the smaller ornamental trees, more suitable for lawns of an acre or two, are,—the horse-chestnut, the finest of which by far is the common *Aesculus hippocastanum*; the dog-wood, (*Cornus florida*), and Aronia, (*A. Botryopium*), eminently beautiful from their profusion of early spring flowers; the common and glutinous locust, and the honey locust, (*Gleditsia*); the Siberian crab; the Chinese double flowering apple; the weeping, and golden ash; the weeping, and golden willow; the *Cercis*, or Judas tree; the mountain ash; the white poplar or *Able*; the American, and European larch; the latter inferior to no tree in beauty.

American and exotic ornamental shrubs are very numerous. The following list embraces only some of the finest, which are either natives of our forests and wilds, or may be obtained from most of our principal nurseries.

EARLY SPRING FLOWERING.

Daphne mezereum, dense pink flowers; berries poisonous.
Cydonia japonica, Japan quince; flowers numerous, large, and bright scarlet.
Amygdalus nana, double flowering almond; branches densely covered with handsome flowers.
Ribes aureum, Missouri currant; flowers yellow.
Shepherdia argentea, Buffalo berry; yellow.

LATE SPRING FLOWERING.

Lonicera Tartarica, Tartarian honeysuckle; flowers white, and light red; abundant; very beautiful.
Philadelphus hirsutus, large white flowers. *P. coronarius*, flowers smaller—(*Syringa*).
Syringa vulgaris, common lilac. *S. persica*, Persian lilac; panicles larger, and the shrub of more airy growth than the common lilac.

Halesia tetrapetala, silver bell tree; handsome pendant white flowers.

Azalea nudiflora, beautiful light red flowers.
Pothogilla alnifolia, white.
Berberis vulgaris, barberry; racemes of yellow flowers.
Rubus hispida, rose acacia; large, handsome, rose flowers.

Calycanthus glaucus, sweet scented shrub; flowers dark red; very fragrant.
Chionanthus virginica, white fringe tree.
Kerria japonica, Japan globe flower; flowers double; yellow.
Spiraea hypericifolia, flowers small, white; abundant.
Rubus sanguineus, scarlet flowering currant.

EARLY SUMMER FLOWERING.

Viburnum opulus, snowball; its splendor well known.
F. arvense, bush cranberry; large, white corymba.
Vaccinium stamineum, a mass of white flowers.
Rubus odoratus, large, red flowers; dense rich foliage.
Spiraea salicifolia, dense, white, terminal panicles of flowers. *S. angustifolia*, numerous, dense, white corymba.
Lonicera xylosteum, fly honeysuckle; yellow.

Rhus cotinus, purple fringe tree; very singular and beautiful, especially in autumn.

Colutea arborescens, yellow.
Cytisus laburnum, common laburnum; yellow.
Symphoricarpos racemosa, snowberry; handsome white berries in autumn.

LATE SUMMER FLOWERING.

Hibiscus syriacus, (*Althea*), single white, shaded with purple. The double varieties possess inferior beauty; the single and semi-double very handsome.
Magnolia glauca, large, fine white flowers.

Ceanothus americanus, white flowers, in short dense racemes.

Esculus macrostachya, large showy spikes of white flowers.

Jasminum humile, yellow; the only species hardy here.
Spiraea tomentosa, flowers, pale purple; in a showy, dense, terminal raceme.

Roses also constitute a large and important class of ornamental shrubs. Long catalogues are given; but many named varieties differ only by very slight shades. Among a few of the finest and most distinct are the tall, double white, the royal province, the scarlet Austrian, (orange,) the common moss, belle alliance, (variegated,) Harrison, (double yellow,) Detroit, (climbing,) Labrador, remarkably fine and graceful in growth, &c. &c.

CLIMBING SHRUBS are not only eminently desirable from the constantly varying and graceful forms which they assume, and which may be given to them at pleasure, but also from the beautiful covering which they give when trained over otherwise unsightly objects, as wooden fences, stone walls, and rough out buildings. Among them are the following:

The *Detroit rose*, growing rapidly, and throwing out at mid-summer a brilliant profusion of showy flowers.

The trumpet flower, (*Bignonia radicans*), with its dark, rich, large trumpet shaped corols.

The native clematis, (*Clematis virginica*), common as a native in New-York; white flowers.

Ampelopsis hederacea, (sometimes called five finger,) grows luxuriantly, and often covers the trunks of our forest trees 60 or 70 feet high, presenting in autumn a splendid glow of bright scarlet from the color the leaves then assume.

Aristolochia tomentosa and *A. siphia*, are handsome, delicate twiners, with singular flowers.

Atragene americana, nearly resembles clematis; large purple flowers.

Menispermum canadense, a native of our forests, and a light, graceful twiner.

Periploca græca, flowers purplish brown; growth rapid and dense.

Celastrus scandens, (bittersweet), highly ornamental in winter from its scarlet seeds.

The honeysuckles are some of the handsomest climbers; among the many may be mentioned as most desirable the Chinese, (*Lonicera flouzosa*), the woodbine, (*L. peryclymenum*), the native yellow trumpet, (*L. flara*), and the scarlet trumpet, (*L. sempervirens*). The latter is eminently beautiful; and its bright red flowers continue to appear plentifully through a large portion of summer and autumn.

The different grapes serve as excellent coverings for objects to be concealed; their rapid growth and dense foliage fitting them well for this purpose.

The English ivy (*Hedera helix*), being an evergreen, would exceed all other climbers for this season, were it not too tender for our winters when elevated above ground.

On the proper disposition of trees and shrubs, to produce the best ornamental effect, whole volumes might be written, and the subject remain unexhausted. A few leading rules may, however, be useful to those who have not given any thought to this point. It is a very common and erroneous opinion, derived from the first impression on seeing specimens of the natural and geometrical styles in planting, that the latter requires far more of art and study in executing it than the former, which is regarded as merely an accidental jumbling of parts together. But the fact is just the reverse. The perfection of art consists in producing a pleasing effect, while the art which produced it is concealed from the spectator. The painting of a raw student exhibits nothing but the most elaborate marks of the pencil, while their combined whole is perhaps stiff and formal. But the work of the master, though the parts were apparently dashed off with ease and rapidity, exhibits as a whole a beautiful combination; and strokes which appear rough and merely accidental, were really laid on with a most careful eye, and are perhaps absolutely essential to the fine expression of the picture. It is precisely similar in ornamental planting; and nothing but a close and careful study of the expression of the varied and endless groups, which may be composed from a large collection of trees and shrubs, can enable any one to arrange them to the finest effect. As a general rule, trees of an entirely discordant character should not be indiscriminately mixed, but those should unite in natural groups which possess some similarity of expression. This similarity always exists with those of the same genus or of the same natural order; and often with a similarity of natural locality, as the elm and willow on low grounds, and the oak and chestnut on hills. So also groups and masses of dissimilar kind should not pass abruptly to each other, but by gradations produced by trees of an intermediate character. Downing's "Landscape Gardening" contains two excellent examples illustrating these remarks, which I here copy. In the first case, suppose it is desired to form a group of trees, in which gracefulness or elegance must be the leading expression.

The willow alone would have the effect; but in groups, willows alone produce sameness; in order therefore to give variety, we must choose other trees which, while they differ from the willow in some particulars, agree in others. The elm has much larger and darker foliage, while it has also a drooping spray; the weeping birch differs in its leaves, but agrees in the pensive flow of its branches; the common birch has few pendant boughs, but resembles in the airy lightness of its leaves; and the three-thorned acacia, though its branches are horizontal, has delicate foliage of nearly the same hue and floating lightness as the willow. Here we have a group of five trees, which in the whole are full of gracefulness and variety, while there is nothing in the composition inharmonious to the practiced eye.

"To illustrate the second rule, let us suppose a long, sweeping outline of maples, birches, and other light, mellow-colored trees, which the improver wishes to vary and break into groups, by spiry topped, evergreen trees. It is evident that if these trees were planted in such a manner as to peer abruptly out of the light colored foliage of the former trees, in dark, or almost black masses of tapering verdure, the effect would be by no means so satisfactory and pleasing, as if there were a partial transition, from the mellow, pale green of the maples, etc., to the darker hues of the oak, ash, or beech, and finally to the sombre tint of the evergreens. Thus much for the coloring; and if, in addition to this, oblong headed trees, or pyramidal trees, were also placed near or intermingled with the spiry topped ones, the unity of the whole composition would be still more complete."

But the limits of such an article as this afford but little opportunity to examine the subject to any extent. An inexhaustible fund of instruction under this head may be found in a study of the beautiful specimens of natural groupings everywhere scattered among the fine scenery with which our country abounds.

The three figures accompanying are intended to represent some of the ornamental erections alluded to in the plan in the first number of the Cultivator.



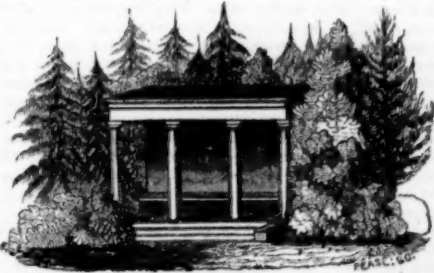
An Arched Gateway—(Fig. 39.)

Fig. 39 is an arched gateway for a garden entrance, where the gothic style of architecture prevails in the house. It may be made of wood and painted, or of the rough trunks of trees with the bark on and thoroughly whitewashed, and then covered with delicate climbing shrubs.



An Arbor—(Fig. 40.)

Fig. 40 is a covered arbor; the posts may be rough and round, and the roof made of unplanned boards, well whitewashed. The back side is covered with lattice-work. Climbers will render it sufficiently ornamental. Such an erection is well suited for the back corner of the garden, represented in the plan in the first number.



An Alcove—(Fig. 41.)

Fig. 41 is an alcove, to be placed facing the sun, and well sheltered by evergreens, and is intended as a covered seat in cool sunny weather. It may be situated at the back corner on the left of the plan, if the aspect is right; but if not, it may stand at the termination of the straight walk in the garden, if no green house is there. If in Grecian style, as represented, it may be made cheaply; but if the house be in the pointed style, that style should also prevail in the alcove, which would perhaps be more in keeping with the wild expression of the evergreen trees around it.

J. J. THOMAS.

PRODUCT OF A GARDEN.

EDITORS OF THE CULTIVATOR.—Enclosed is a statement of the amount of produce from the Retreat Garden, the last year.

The garden contains an acre and a quarter of land—

surrounded by a carriage road, and a border planted with evergreens, rose bushes and other flowering plants.

Lettuce, 1100 very large heads.	Cucumbers, 756 dozen.
Cabbages, 1490 do.	Cucumbers for pickles, 7 bbls.
Radishes, 700 bunches.	Beets, 147 bushels.
Asparagus, 250 do.	Carrots, 24 do.
Rhubarb, 200 pounds.	Parsneps, 26 do.
Narrowleaf peas, (in pod) 14 bushels.	Onions, 120 do.
Beans, (in pod) 40 bushels.	Turneps, 80 do.
Sweet corn, from plantings at 3 different times, 419 dozen.	Tomatoes, 40 do.
Summer squash, 716 dozen.	Early potatoes, 33 do.
Squash peppers, 45 dozen.	Winter squash, 7 wagon loads.
	Celery, 600 large heads.

These articles, estimating their value at the lowest price for which they were sold during the season, in this neighborhood, would have fetched \$625; but I wish to add what is well known to those who reside in this vicinity, that they were of the very best and earliest kinds; and had they been carried to market and sold, instead of being mostly consumed by our large family, a much larger sum would have been realized. This garden has not only produced an abundant supply of these articles, for our family, averaging 130 persons, but more than we could consume; and we accordingly sold and gave away a considerable amount of rhubarb, lettuce, radishes, beets, celery, &c.

Several of the patients of this institution, for their amusement assisted in the cultivation of the garden; but our excellent gardener, Mr. Thomas Burns, assures me that he should consider it an easy task for one person to do all the labor required.

The land is good, but no better than the land in this region. It has been well manured every year; but no extra or unusual expense incurred.

I have believed that more might be realized with but little labor from a large garden in the neighborhood of this city than is from many large farms with much labor; and this account of the Retreat Garden must satisfy others of the fact, and I should be pleased if it induced farmers—not to neglect their farms—but to pay more attention to their gardens, not only for the comfort and enjoyment of their own families, but as a source of profit.

A. BRIGHAM,
Superintendent of the Retreat for the Insane.
Retreat for the Insane, Hartford, Feb. 23, 1842.

ON THE CULTURE OF THE PEACH.

MESSRS. GAYLORD & TUCKER—I take the liberty of offering a few suggestions on the culture of the peach. The many casualties with which the tree bearing this delightful fruit has to contend in country places, where a good market does not justify great care, are so discouraging that very few are willing to be at the trouble of rearing them; and yet, I conceive that the exercise of a little good sense in the choice of ground, and care of the trees, will insure a fair crop of delicious fruit in every average season.

In fact, the neglect to select the better kinds of peaches has caused this fruit to be greatly underrated by our farmers and gardeners in general. The luxury of a luscious peach is known to but few comparatively. I shall not attempt here to enumerate the various choice kinds which may be procured at all the good nurseries in the country, as printed catalogues can be obtained of the proprietors gratis.

In the choice of a site I would select a hill side, having a western or even a northern aspect, so that the morning sun would not strike the trees until an hour or two high. There is a general error that it is the frost which kills the tender kinds of hardy trees. It is the action of the sun, striking abruptly upon the frozen wood. This injury is generally effected in autumn or spring, when the sun has more power, and seldom in mid winter, when he has less. This law, so applicable to the wood, is equally so to the fruit buds. Another advantage in such a site is, that the situation being less favorable for early and late growth, the buds do not push so early in the spring, and vegetation ceases much earlier in the fall, so that the wood hardens or ripens, and prepares itself for hibernation. In confirmation of this position,—and the fact itself is valuable, where a few trees only are to be grown—I have observed that peach trees planted on the west or north side of a house or barn are less affected by frost, and fail of fruit only in extreme seasons.

Another enemy with which the tree has to contend is the grub. This is a serious one, but not invincible. Some gardeners, to obviate this difficulty, bud or engraft upon plum stocks; but phytology teaches us that trees so managed will be very short lived, and seldom will produce more than one crop of fruit. The only way is to go directly at the enemy. Every household produces weekly the very best remedy for this evil: that is soap suds. Let the suds, pretty strong, be applied once a month during the open weather, around the roots of the tree, taking care that the liquid does not flow off, and I will vouch that no grub will infest them. Even if they have commenced their work, remove the gum which issues from the wound, so that the liquid can fill it, and the grub will soon crawl out and confess the potency of the medicine by his instant death. The soap suds, too, is an excellent manure, which of all trees, the peach requires the most. No tree so soon exhausts the soil in which it grows; and manure, either liquid or solid, should be poured around or dug in about the tree every year.

The peach tree requires a light, dry and rich soil. It is very impatient of standing water, and delights to push its roots not only wide but deep. Good fruit can only

be expected from thrifty growing trees. I have observed that cow-yard, or chip manure well rotted and mixed with a small portion of wood ashes—if leached, the portion may be greater—is better than stable manure.

The yellows is a disease to which this tree is incident, and for this, I know no remedy but immediate eradication. With regard to this disease, I have but little experience; but I am inclined to think it can be avoided by proper culture, and seasonable application of the necessary manures.

J. DILLE.
Newark, O., February 25, 1842.

A REMEDY FOR UNPRODUCTIVE TREES.

MESSRS. GAYLORD & TUCKER—In the last volume of the Cultivator, page 77, I noticed a recommendation for grafting apple trees that are "shy bearers." That grafting is not a certain remedy, one instance I will mention will show. Two trees, standing not to exceed five rods distant from each other, were grafted on the same day with cions that were cut at the same time, and if not from the same tree, there was no difference in them to my knowledge. One of the trees commenced bearing the second year after setting, and continued to bear more or less yearly. The other grew more thriftily for four or five years without producing a blossom that I could discover. Having heard of ringing or girdling trees that produced no fruit, and considering this one useless and a fit subject to experiment upon, I took a ring of bark from about one-half of the branches as near the stem of the tree as convenient. The following year those branches operated upon produced fruit, and the others none. The next succeeding year, those which had previously remained barren, produced fruit; and those which had been operated upon, none. Before the season of fruit the next year, I left the premises, which was ten years ago, and know nothing of the production of the trees since that time. The kind of fruit, blue jilflowers. On the premises which I now occupy are two trees, which were said to have been inoculated, and each producing the same kind of fruit, but different from the above mentioned. By the like operation, the same effect was produced for two succeeding years; since that time, both trees have produced bountifully once in two years, and in no season entirely barren. In the above cases, one-eighth or one-twelfth of an inch of the wood was laid bare, but cut wider at the surface for the convenience of taking off the bark. In the above instances the bark was taken off in the month of June, when the bark peeled easily. Branches operated upon grow larger above than below where the bark is taken off; and from this, I infer that a check is put to the too free circulation of the sap downward between the bark and wood. If that is not the cause, will you or some of your correspondents explain the subject.

Volney, Oswego Co., 1842.

JOSEPH SANFORD.

TRANSPLANTING FROM THE FOREST.

TREES and shrubs transplanted from the woods to open situations seldom grow. The cause of failure is, that they are taken from shade and moisture and exposed to the hot sun, which stops the circulation; the body of the plant perishes, and the root in consequence dies also. It is well known that if briars are cut in the heat of summer the roots generally decay and die. So with the trees and shrubs in question. To remedy this evil, it is suggested to cut off the tree or shrub close to the ground and plant the root only. The young shoots grow out with the spring, are naturalized to their situation, and soon attain a height and size as great as that which was cut off at planting. The fact that transplanted trees sometimes die at the top, and yet sprout from the root, proves the correctness of the above suggestion. The writer has been informed that the trial of this method has been made in another state with complete success, and recommends the experiment the ensuing spring. It is obvious that trees which do not sprout are unfit subjects for this process; such as pines, cedars, &c.

New-Jersey, Feb., 1842.

GRAFTING A WHOLE TREE.

A neighbor of Van Mons, the celebrated Belgium horticulturist, having a good apple tree of some ten feet in height which he was obliged to cut down, Van Mons determined to make an effort to preserve it entire, by grafting it on one of his own, but of inferior fruit. A tree of the same size was selected, which was cut square off a little distance above the ground, the surface of both made smooth, and the graft or rather tree placed in its new position by the operation of pin grafting. Grafting clay was placed around the junction, earth heaped over the spot, and the tree strongly secured by stakes. A union between the parts was soon effected, and the second year the tree fruited as well as formerly.

NEW MODE OF PROPAGATING FRUIT TREES.

THE New-Hampshire Whig says—"Two of the best farmers within our knowledge secure their fruit trees thus: they dig at some distance from the body of a favorite tree until they find a root, which they cut off. The part disjointed from the tree is turned up so as to appear above ground. This sends forth shoots the first season, and bears in a few years fruit precisely like the parent tree. Let those whose trees are decaying, or who wish to increase good varieties, try the experiment."

Veterinary Department.

HOOF-CUTTER—(Fig. 40.)

MESSRS. EDITORS—Our sheep in Vermont suffer much from the severity of our long winters, in freezing their feet, which causes their hoofs to grow to an uncomfortable length; which for the benefit of the sheep should be taken off (of some) as often as twice a year. I have seen some cut them with an axe, some with a chisel and mallet, and I have spent much time in cutting their hoofs with a strong knife, which is not very easy work for the hand. I have an instrument for cutting sheep's hoofs, recently invented here, a set of which every wool grower should be the owner of, unless he has something that will do the work better. For the sake of a name, we will call them Hoof-Cutters; of which, the following is a rough representation.



The handles should be 12 or 14 inches long, coupled together with a bolt and nut, for the convenience of taking them apart to grind. The edge should be 2 inches wide, straight, and made of good steel. The opposite jaw, of the same width, should have a piece of copper dove-tailed into it at a, for the sharp edge of the instrument to strike upon. It should be made sufficiently strong in all its parts to stand the strength of a strong man.

The best time for cutting hoofs is after a rain sufficient to soften them. Sometimes small horns turn and grow into their heads, and often injure their eyes, which can frequently be taken off with the Hoof-Cutters better than with any other instrument.

Two men, one to catch and hold the sheep, the other to handle the instruments, will trim two or three hundred sheep in a day. Care is necessary not to cut so close as to touch the quick. They may be made by any blacksmith who can make edge tools. A large copper or cent, when drawn into proper shape, is sufficient to dove-tail into the lower jaw. Brother wool growers, if you have anything that is to be preferred to the Hoof-Cutters for doing this work (which I consider very essential in promoting the condition of our sheep) please communicate. If not, try the Hoof-Cutters; and my word for it, the benefit derived will well reward the experiment.

J. N. SMITH.
Chimney Point, Addison Co., Vt., Feb. 9, 1842.

EPIDEMIC AMONG HORSES.

A disease has prevailed this season, very extensively throughout New-England, destroying many valuable horses. No name, so far as I have learned, has been assigned to this ail; it is, evidently, inflammatory. Its premonitory symptoms are lassitude, stiffness and swelling of the joints, loss of appetite, and occasional running at the eyes. These symptoms are followed, in severe cases, by swelling of the head and the glands of the throat, accompanied with considerable fever. The most successful treatment has been, bleeding in the neck, to the amount, at least, of one gallon; (this should be done in the forming stage of the disease,) and followed by one or more brisk cathartics of Glauber or Epsom salts. When this treatment sufficiently subdues the inflammation, the animal should be given, during his convalescence, a tea spoon full of crude antimony, daily.

CHARLES A. SAVORY.

Contoocookville, N. H., Feb., 1842.

TO STOP THE EFFUSION OF BLOOD.

MESSRS. EDITORS—In answer to an inquiry in the last number of the Cultivator, respecting a remedy for stopping blood, I will relate two instances of the application of cobwebs, with instantaneous and complete success. The first was a cut just below the fetlock joint of a young horse, from which a stream of blood of the size of a knitting needle spirted very swiftly. A small wad of cobweb from the cellar was bound on, which entirely stopped the blood in an instant. At another time on bleeding a horse in the mouth, the incision was made deeper than was intended, letting more blood than was designed. After other remedies in vain, the above application was made with the same effect as in the first case.

H. MILTON HART.

Cornwall, Ct., Feb. 23, 1842.

HORSE RADISH FOR ANIMALS.

AUSTIN RANDALL, Esq., of Paris, writes to us as follows: "I have seen in your excellent paper no notice of the value of the horse radish for cattle. I have found it very useful for them. If given to cows in doses of a pint at a time once a day, it will materially aid their appetite, and will prevent or speedily relieve cows of the disease called cake in the bag. I feed it freely to any animal of mine that is unwell, and find it of great service to working oxen troubled with the heat. I have had one ox that would eat greedily a peck at a time. Few animals refuse it; and if they do, it may be cut up and mixed with potatoes or meal." Mr. R. cultivates his corn without hilling, and his success with his last crop (73 bushels per acre) is a favorable commentary on the practice.

Silk Culture in the United States.

SILK CULTURE—BY GIDEON B. SMITH.

THE COCOONERY—No precise rules can be laid down for the arrangement of the cocoonery, because every one must be adapted to the circumstances, the extent to which the business is intended to be carried, the location, the situation—high or low, the exposure, and even the climate. There are some general rules, however, that are applicable to all, and which cannot be departed from safely. These are, sufficiency of room for the accommodation of the worms intended to be fed, and for the free and convenient access of the attendants to all parts of the frames or hurdles. The frames should be set in ranges, as directed in the former article; and the passage between the ranges should be at least four feet wide. There should be a passage also two or three feet wide between the walls and the frames, and also between the ends and the walls. There should, if possible, be windows on all sides of the cocoonery; but at least, on the north and south sides. The windows should be provided with blinds, and the sashes should be hung on hinges, that the room may be darkened, or completely aired, or completely closed at pleasure. When a house is to be built expressly for the purpose, an invaluable ventilator may be made by leaving a space of eight inches open in the clapboarding immediately at the floor all around the room, with a board shutter hung upon hinges, that it may be opened or shut close at pleasure. This when open admits a free current of air through the cocoonery and under the frames, and in sultry weather will be found of immense advantage. One or two trap doors in the ceiling to admit of the upward passage of the air is also of great benefit. When the business is to be carried on in a small, domestic way, however, these things of course cannot be done; and such conveniences as the room selected affords for ventilation must be put up with. In such cases, where there is any choice, the room should be selected that affords the greatest facilities for ventilation. For example, a room that has windows on the north and south sides, or even a door on one and a window or windows on the other, should be preferred to one having windows or doors on the east and west sides. So also a room with a high ceiling should be preferred to one with a low ceiling; and a room in the second story, to one in the first. A room on the north side of the house is better than one on the south side, because it can be kept cooler, provided it has sufficient ventilators.

PAPER NETS—Besides the frames described in my former paper, I would recommend the preparation of paper nets, for the purpose of cleaning the hurdles. They are made by a punch as follows: the paper should be of a strong texture, and of the size of the frames or hurdles. Paper half the size of the hurdles may be used by pasting two sheets together. The punch is to be two thirds of an inch diameter. I use one made by cutting off about three inches of the end of a gun barrel, and grinding the end to an edge from the outside, and a block of smooth grain wood to punch on. Half a quire of paper may be punched at a time by the use of a mallet. The holes should be in rows one-third of an inch apart; and the holes of each row should be diagonal in relation to each other. About three inches of the paper at each end should be left without holes, turned over, and the edge passed down, to form a loop for a small, smooth rod to pass into to facilitate their removal with the worms on them. There ought to be about three sheets of these nets for every hurdle. The rods for the paper nets may be made of any light wood, about the size of a small broomstick, long enough to reach the whole width of the net, with six inches for a handle. The use of these paper nets will be described hereafter. I will now say, however, that in France they are considered an invaluable improvement in silk culture; and that the few who have used them in this country approve of them very highly. They are used in clearing the hurdles, removing and separating worms, &c. When it is desired to clean a hurdle, a net is spread over the worms before feeding in the morning, and a few fresh leaves spread over the net. In a few minutes the worms will pass up through the holes; and then the rods are passed into the loops at each end of the net, and the net with the worms raised and carried to a clean shelf. So, when you wish to thin the worms on a hurdle after each moulting; as soon as a portion of the worms revive, lay on a net with fresh leaves, and bear off to a clean hurdle all that have revived. This is very necessary at every moulting, because there are always differences in the moulting and revival of worms; and all that moult and revive at one time should be carried to one hurdle. But I shall have occasion to speak of this subject more at large hereafter. Thus much I thought it best to say now, that some idea of the value of the paper nets might be had, and that those who expect to engage in silk culture might thus be induced to prepare them.

I do not know that any other fixtures are materially necessary to a beginner; all others, or the few simple things necessary, will suggest themselves to every one as they progress. I shall, in my next, speak of the hatching and rearing of worms.

BOUNTY ON SILK IN TENNESSEE

The legislature of Tennessee passed an act at its recent session granting a bounty of fifty cents per pound on reeled silk, and ten cents per pound on cocoons—the produce of that state. This is equivalent to one dollar

and fifty cents on every pound of reeled silk; or about 33½ per cent added to its value, and will just about pay the whole expense of production.

G. B. S.

Domestic Economy.

ORANGE COUNTY BUTTER.

MESSRS. GAYLORD & TUCKER—I am now in the region of the celebrated Goshen butter; and as I have frequently heard the question asked why Goshen butter sells for six or eight cents a pound more than that of other good butter regions, I have concluded to give you the result of my inquiries as to the method of making butter here.

1st. The milk house or cellar should be under ground, and entered through a door on the north or east, with a stone or earth bottom, and two or three windows, with such shutters as to entirely exclude the rays of the sun. A back cellar should be made, dark and cool, with one small window to keep the butter in. Thousands of tubs of good butter are spoiled for want of a good cellar to keep them in.

2d. The milk is put into shallow tin pans, with a pint of cold water in a pan, and set on the bottom of the cellar, where it remains till it is thick; so thick that when it is cut or broken whey will appear. It must by no means stand till whey rises and stands between the milk and cream. To a barrel of milk, one pail full of cold water is added. It is now churned, cold or warm water being added during the process to keep it at the right temperature. If the weather is too cool to allow the milk to change, a little butter-milk is put into each pan when it is strained. In very cold weather a small box stove is used to warm the cellar.

3d. The butter is taken out with a ladle, (the hands would warm it and make portions of it oily,) washed through cold water twice, and then salted with as much salt as will dissolve, and no more. Let it stand in the tray on the cellar bottom only till it is cool enough to work. Work the milk out. (This process must not be continued too long, till the butter becomes sticky or oily; for from this state it could not be recalled.) Pack it closely in the tub, and cover it well till the tub is filled. Then put a thin cloth over the butter and keep it covered with a strong brine till it goes to market. The butter cellar should have a little air admitted to prevent mold. To prevent the firkins from molding, they should be set so as not to touch the wall; and in a very damp cellar, on a board an inch from the bottom.

This is the result of much and careful inquiry; and whether this is the best method or not, the butter is certainly the best I ever tasted. The best Oneida or Chango butter that I have seen is not equal to it. But why should it not be? The county is certainly as good. Great care must be used to make and preserve good butter in any place. Sixpence a pound will pay for this care. Why will not all our farmers strive to secure this sixpence? Yours sincerely,

J. EDMUNDS.

P. S. In kneading the butter, it should be simply pressed with the ladle, and not cut or rubbed. Pressing it will make it solid; while rubbing or cutting it will make it soft or oily.

J. E.

A FARMER'S BREAKFAST.

MESSRS. EDITORS—If you will permit me, I wish to give you a description of a farmer's breakfast. It will not perhaps be as tempting as those served up on city tables, but more substantial, and doubtless as healthful.

The first thing is the bread; for now, as in the days of Martinus Scriblerius, "bread, gentlemen, bread is the staff of life;" and during the winter months, our bread for the breakfast is mostly hot buckwheat cakes. Some complain that such cakes are unpalatable, and liable to become sour. It is true, some do not like the taste of such cakes at first, but I have seen no one who did not soon become fond of them; and there is no more necessity of sour buckwheat cakes than of sour wheat bread. I wet up my cakes in the usual manner, (a quart of flour for 7 or 8 persons, with lukewarm water sufficient to make the batter of the right thickness, with about a teaspoon of good sweet yeast—the yeast only necessary when you commence using cakes, or if the batter becomes sour and needs renewal,) set the stone jar in which I keep the batter where it shall be moderately warm until it begins to rise, when I remove it to a place where the temperature is low, and the fermentation is checked before the mass is sour in the least. This batter is baked in small cakes and placed on the table, hot; care being taken to leave enough in the pot to ferment the next wetting up, which should be done as soon as breakfast is over. A loaf of wheat bread is placed on the table to suit the taste of such as may prefer it to the cakes.

The preparations for the bread completed, the next thing is the meat. For this, I prefer beef of good quality—not the coarse, tallow loaded meat that is sometimes seen, but the fine grained flesh, well mottled with fat, tender and delicious. This should be kept frozen; and when wanted, a sufficient quantity chipped or sliced off, the thinner the better, and placed in the fryer on the stove; cover it, and do not hurry it in the cooking, or burn it. For a gravy, which is essential with cakes, I take a spoonful or two of flour, a sufficient quantity of butter and pepper, and work them well together in a dish. When the meat is properly cooked, I turn from the tea kettle hot water into the dish, stirring it constantly till the whole is incorporated and a rich gravy

produced. This is turned on the meat, the whole boiled up and stirred, when it is placed in the dish ready for the table.

But a farmer could not make a breakfast without potatoes. One of the first things to be done, therefore, in getting a breakfast ready, is to select ten or a dozen potatoes, (they should be kept ready washed, but secured from light in a cool cupboard or cellar, as light is injurious to the quality of all roots,) pinkeyes or Mercers my husband thinks are the best, and place them in the stove oven, turning them occasionally to see they do not burn, and they will be done by the time the other parts of the breakfast are ready.

These are the substantial of a farmer's breakfast. But other things are necessary to give zest and relish to the meal. A bowl of apple sauce made with about one-third quince to two-thirds apples, the cider made from sweet apples, and reduced by boiling about three parts to one, may be considered indispensable; pickles, too, green, hard, and thoroughly penetrated with cayenne, or garden red peppers, will not be amiss. Coffee or tea, as the taste may determine, not too strong, as either may be injurious, with sweet cream and sugar, will furnish the drink for the farmer's morning meal. Mince and apple pies, with cakes and cheese, are ready for such as wish them.

The table is ready. The meat and potatoes, of right, occupy the center, flanked by the smoking cakes and coffee. Around are the sauces, the pies, cakes, &c. Industry and sweet sleep have given an appetite; and with the invoked blessing of heaven, the farmer's breakfast, plain and simple as it is, is not unfrequently better enjoyed than the late and sumptuous repasts of the rich and opulent.

Should you give a place to this, I may hereafter give you a picture of a farmer's dinner.

A FARMER'S WIFE.

WINTER BUTTER.

THE following mode of making butter in winter is recommended by E. H. Derby, Esq.: The milk when taken from the cow is immediately strained into pans and set in the coldest part of the house. As soon as the frost begins to operate, a separation takes place; the cream rises in a thick paste to the top, and leaves the milk, without a particle of cream, frozen in the pan. The cream is not so hard but that it can be easily scraped off with a spoon down to the solid ice; it is then set aside till a sufficient quantity is collected for a churning, when it is warmed just so much as to thaw the cream; five minutes churning will convert the cream into good butter.

A.

PINE APPLE CHEESE.

A lady friend of ours wishes to learn the method of making this kind of cheese, which seems at the present time to be rather a favorite article in the market. We hope that some of our dairy friends who are acquainted with the process of making this cheese will furnish us with a full account of the method adopted by them. A compliance with this request will be considered by us as a personal favor, and the information will doubtless be acceptable to many.

Notes for the Month.

A GOOD COW.—Mr. S. Brooks, of Steuben, Oneida county, has furnished for the C. N. Y. Farmer an account of the product in butter of a cow for the year 1839 and 1840. He says—"I made from one cow, after supplying my family—consisting of three persons—with butter, and milk, in the year 1839, 3004 pounds of butter, which I sold. In 1840, with the same number of persons in my family, I made 320 pounds of butter, after using for my family butter and milk as we wanted. The cow was fed 14 pecks of potatoes boiled, with the sour milk mixed with it, from 20th of September to the 20th of May. The cow had two calves during this time. She was a cross between the English and our common breed of cattle."

EFFECT OF PLASTER ON SOILS.—One of the most satisfactory answers we have seen to the charge so frequently made, that plaster exhausts the soil, is found in the following, which we copy from the N. G. Farmer: "Josiah Bartwell, of South Hadley, Mass., has four acres of pasture ground, and applies to it annually 1000 pounds of gypsum. The same application, and at the same rate has been made for 35 years in succession. On this lot he pastures annually one large yoke of cattle, one horse, two cows, and sometimes three cows. Prior to the use of plaster, Mr. B. says it required at least six acres of this land to afford as much feed as he has obtained from one acre by using plaster. He has also a piece of mowing ground which contains four acres. Two crops of hay are taken from it regularly. On this ground he uses plaster of Paris freely, and applies a top dressing of manure. His annual product of hay is fully 16 tons."

CASTOR OIL IN THE WEST.—According to the Alton Telegraph, some twelve or fifteen thousand dollars has been paid out at Edwardsville for castor oil beans, grown in the vicinity; and the oil mills are turning out about 100 gallons of oil daily. Experience has proved that these beans at \$1 a bushel are as profitable a crop as Illinois can produce; and the demand is steadily increasing. Mr. Marsh of that city has commenced the manufacture

of castor oil candles; and the light, on comparing them with spermaceti candles, was found to be much more brilliant than that given by the latter; and in burning, there was not the least unpleasant smell. Mr. Marsh says they can be afforded at one-half the price of spermaceti candles. Success, we say, to every new production and manufacture in the West.

"SPIRIT OF THE TIMES."—The 12th vol. of this splendid sporting journal, commenced on the 5th March. As a chronicle of Field Sports, the Turf, Literature, &c. the "Spirit" will be most acceptable to gentlemen who take an interest in the subjects indicated, and may be considered unrivalled. The first No. of the new vol. was accompanied by a portrait of "Monmouth Eclipse," 13 by 16 inches, engraved on steel in the first style, by Dunne, from a painting by Troye. This is to be followed by similar engravings of "Grey Eagle," and "Col. Johnson, the Napoleon of the turf." Price of the Spirit of the Times, \$10 in advance. New subscribers who forward two years in advance will be entitled to the above, and receive ten splendid steel engravings of distinguished horses, actresses, &c. which have appeared in previous volumes. Address Wm. T. Porter, Esq. Editor, New-York.

THE AMERICAN TURF REGISTER, commenced a new vol. with the present year—64 pages octavo, at \$5 a year. Also edited by Wm. T. Porter, Esq. Each No. is embellished with a steel portrait of some celebrated horse. The March No. has a portrait of Ophelia, the dam of Grey Eagle, together with five illustrations on wood, of the "New Tale of the Tub."

EXHIBITION OF STOCK, &c. IN GEORGIA.—We received an account of the Exhibition of the Hancock Co. Ag. Society, immediately after it took place, in Dec. last, and it would sooner have been noticed, had not the paper containing it been mislaid. There was a handsome display of domestic products, and we are pleased to see that ten premiums were awarded to ladies. There was also a fine show of stock, including horses, cattle and swine. We perceive that our enterprising friend and agent at Sparta, Capt. R. S. Hardwick, carried off no less than six prizes, and several others were awarded to stock bred from animals introduced into the country by him.

WESTERN AG. SOCIETIES.—The farmers of our Western States and Territories, notwithstanding the fertility of their soil, seem to appreciate fully the necessity of an improved system of husbandry, and are organizing Agricultural Societies and circulating Agricultural papers with as much spirit and energy as their brethren in the older sections of the Union. A Territorial Ag. Society has just been organized in Wisconsin, which promises to do much for the promotion of the good cause in that Territory. An association has for some time existed in Northern Illinois, called the "Union Ag. Society," embracing several counties, which issues the *Union Agriculturist*, at Chicago, under the direction of J. S. WRIGHT, Cor. Sec'y, which is one of the best papers we receive.

"THE HERD BOOK."—Mr. Sotham has shown us a letter from Geo. Coates, Esq. editor of "The Herd Book," from which we learn that all the copies of the first and second vols. were long ago disposed of, and that it is his intention to have them reprinted. The price of the third vol. is one guinea. The fourth vol. will be published probably about the first of January next.

FAT CATTLE.—Mr. Tonkin, of Woodbury, New-Jersey, has seven fat cows,—one a full blooded Durham—one three-fourths, the other half bloods, bred by himself; which are spoken of in the New-Jersey papers as superior to anything of the kind in the country, and well they may be, if we may judge from the description given of them. They are estimated to weigh 3000 lbs. each.

GOOD PIGS.—Mr. S. S. Robbins of Salisbury, Ct., informs us that he recently killed two pigs, 9 months and 21 days old, which weighed, dressed, 316 and 355 lbs. They were a cross between the Byfield and Berkshires.

A CHALLENGE.—During Mr. Sotham's recent visit to England, he published a letter in the *Mark Lane Express*, in reply to Mr. Allen's allusion to the "one man's herd," in his account of his visit to England, given in the Nov. No. of the *Cultivator* of last year; in which he challenges Mr. Allen to show 30 cows and a bull of this "one man's stock," against a like number to be selected from the Short Horned herd of R. Lovell, Esq. Edgecott Lodge, for fifty guineas each. The money to be deposited in the Banbury Bank; and the judges to be selected, one by Mr. Lovell, one by the "one breeder," and the two named to select the third.

INQUIRIES.

A Subscriber in Illinois, inquires for "portable mills for grinding corn for feed," where they can be had, and their cost.

A correspondent in Georgia wishes to know the "best method of drying and packing figs."

The same correspondent asks for a "correct account of Culvert and Crane's cotton gin, said to be used at the mill of the Lowell Co. (Mass.) and which is said to be superior to our common or Whitney gin. What is the cost and size of a gin that would pick 2000 lbs. of seed cotton per day? Any improvement in the cotton gin is of great importance at the south, and we want to know more about this one."

"I wish to enquire through the *Cultivator* for a strong sharp instrument to cut large bogs with a team. A full description of such an instrument, from which one can be constructed, will be thankfully received.

R. M. HART."

AG. SOCIETY OF THE U. STATES.

To POST-MASTERS.—The Board of Control of the Agricultural Society of the United States request the various post-masters to make returns to the treasurer of the society, (as requested by the Circular,) before the first of May, of all subscriptions by them obtained.

ACKNOWLEDGMENTS.

Our thanks are due to the several donors for the following articles, received during the last month:

"Lectures on Agricultural Chemistry and Geology," by Prof. Johnston of the University of Durham—re-published by Messrs. Wiley & Putnam, New-York, in a handsome duodecimo of 280 pages. From the publishers.

"A Buck Manual for Farmers," by Samuel L. Dana,—published by D. D. Birby, Lowell. 12 mo. pp. 242. From the Author.

"Report on the Culture of Silk," made to the H. of Rep. of Ohio, by A. A. Bliss, Esq. chairman of select committee on that subject—showing the importance of the silk culture, and the rapid progress it is making in that state. From the Author.

A beautiful colored lithographic portrait of the celebrated Improved S. H. Durham Cow "Dairy Maid," and her calves "Leader" and "Allan a Dale," owned by James Gowen, Esq. Philadelphia. Drawn on stone by Holly, from a painting by Woodside, and colored to the life. From Mr. Gowen.

Rev. Mr. Chavies' Oration before the American Institute, at its last Fair. From Alex. Walsh.

Hovey & Co's. Catalogue of Seeds, Roots, Implements, Books, &c. Boston.—Catalogue of C. H. B. Breck, seedsman and florist, Boston.—Catalogue of Ellwanger & Barry's Mount Hope Botanic Garden and Nursery, Rochester. From the Proprietors.

Regular files of the *New Farmer's Journal*, and the *Mark Lane Express*, London, for January, from the Editors. Also the *Gardener's Chronicle* and *Farmer's Magazine*, from our London correspondents.

NOTICES TO CORRESPONDENTS, &c.

Though some of our friends may perhaps be disappointed in not seeing their favors in the present No. of the *Cultivator*, we think all must be satisfied that we are disposed to give place to their communications as early as circumstances will admit. We publish this month articles from something over forty correspondents, (including inquiries,) and yet a number are left over which we had intended to have given in this paper. We have yet on hand, several which have been heretofore acknowledged, and have received during the past month, (beside those published,) communications from Wm. Edwards, Henry Watson, G. W., Rich. Taylor, A. Merritt, N. D., Solon Robinson, L. A. Morrell, T. C. Peters, George J. Horsfield, W. G. V. D. B., Magnolia, Anon, S. Moore, B. Chase, J. Buel & Co., Richmond, L. B., Anti-Homespathy, Ua Fermier, A Subscriber, R. North Jr., Commentator, S. M. Pond, Yeoman of the South, H. A. P., Herd Book, L. Durand, G. Cook.

We shall be glad to receive from "Pine Hill," an account of his method of raising spring wheat.

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PITTS' IMPROVED BEE HIVE.

I HAVE made arrangements to supply those who may wish to purchase my improved hives at the machine shop of John A. Pitts, on Paterson's creek, Albany, N. Y.: where hives may be obtained, made of the best materials, and in a neat and substantial manner. Three hives with the protector, including a small treatise on bee keeping, will be sold for five dollars.

Albany, March, 1842.

H. A. PITTS.

ROCHESTER SEED STORE.

M. B. RATEHAM respectfully informs the agricultural public that he has now on hand a very large and superior stock of Garden, Field, and Flower Seeds, which he offers for sale at prices according to the times. In addition to a full assortment of American Seeds, raised the past season by careful seed growers, he has lately received from England a large supply of such Seeds as are grown in greater perfection in that country, selected by his personal friends in the trade.

Thankful for the liberal patronage which this establishment has received for the past seven years, the proprietor hopes, by strict care and personal attention, to merit the continued confidence and support of the public.

All orders from a distance, (containing money or a city reference,) will receive prompt attention. *Catalogues gratis to applicants.*

Rochester, March 22, 1842.

M. B. RATEHAM.

CLINTON COLLEGE AND FARM FOR SALE.

900 ACRES very rich land; 650 in Clover and Blue Grass; numerous excellent springs; good Orchards; valuable buildings of many kinds, &c. &c. I will divide to suit purchasers; and to suit the hard times, will give the best bargain ever offered. \$10,000 for the whole; one-third down in cash or negroes, and the rest in two annual payments.

February, 1842.

F. H. GORDON.

IMPROVED STOCK.

THE subscriber has now on hand for sale two Durham Bulls, 2 years old—1 yearling do.—1 three year old Bull, half Durham and half Ayrshire, (a beautiful animal),—2 Cows, and 1 yearling Heifer, (Durham),—5 South Down Bucks, (yearling,) and several Ewes of the same breed—Berkshire and improved China Hogs and Pigs.

Albany, April, 1842.

C. N. BEMENT.

THE LIVINGSTON COUNTY PLOW.

THE cut given on page 61 of this paper, (fig. 34) is a fair representation of the Livingston County Plow. The circular coulter is the invention of H. Delano, which is an improvement on the straight one. The subscriber has purchased of the patentee the right of said plow for the United States, Ohio and Michigan excepted; and will sell the right of manufacturing and vending said plow, either by counties or states, and furnish patterns also for the two sizes, No. 3 and No. 4, if desired. N. B. The patterns have been recently improved in such a manner as to admit the use of a wrought or cast-iron.

Jordan, Onondaga Co., Feb. 15, 1842.

S. N. NORTON.

RUGGLES, NOURSE & MASON'S PLOWS.

THE American Institute, at their Fair, held at New-York, for the whole Union, and the Massachusetts Charitable Association, at their Fair, held at Boston, each awarded to Ruggles, Nourse & Mason, Medals for the best and most perfect plows; and at the plowing matches of the Agricultural Society, in the justly celebrated Agricultural County of Worcester, in 1837, '38, '39 and '40, all the Premiums for the best work in the field, were awarded to competitors using Ruggles, Nourse & Mason's Plows.

A complete assortment of these justly celebrated plows received and for sale at the manufacturer's prices, by PRUYN, WILSON & VOSBURGH, 39 State-st.

Albany, March 23, 1842.

MULBERRIES FOR SILK, AND OTHER TREES.

W. M. R. PRINCE offers for sale at the Linnean Garden and Nurseries, 100,000 Mulberry Trees of the finest kinds for the silk culture at \$30 per thousand, and at a credit that will enable the purchaser to pay for them out of the silk produced. They consist of the splendid New Circassian, Multicaulis, Expansa, Elata, Alpine, Moretti, and Broussa varieties. Also the usual immense assortment of Fruit and Ornamental Trees, and Shrubby, Greenhouse Plants, Bulbous Roots, splendid Dahlias, and Garden Seeds. The new Catalogues with very reduced prices will be sent gratis to all who apply post paid; and on all orders enclosing cash or a draft, a discount of 10 per cent will be allowed.

Flushing, near New-York, March 7, 1842.

JONES' PATENT SILK REEL.

THE subscriber will furnish these reels (see description in *Cultivator* for March, page 54,) at \$12, (without charge for packing. Patent rights for towns, counties or states will be disposed of reasonably. All orders and communications, post paid, addressed to the subscriber at Buckland's Corners, Hartford Co., Conn., will be attended to.

The annexed testimony is from the Messrs. Cheneys, who are practical silk growers, and are now engaged in its manufacture: "We consider Jones' Patent Silk Reel, in every point of view, far superior to the Piedmontese, or any other now before the public, and the silk reeled on it worth at least fifty cents a pound more to the manufacturer. No silk grower should be without one. Manchester, Ct., Feb. 23, 1842. CHENEY & BROTHERS."

February 15, 1842.

A. B. JONES.

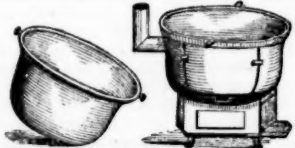
VAN HOSSEN'S PRESS FOR HAY, &c.

THIS press, of which a cut and description are given on page 66 of this paper, is one that must interest all who are engaged in pressing, as much time and labor are saved by it, as is testified to by those who have used it and are well acquainted with the business.

We, the undersigned, having witnessed the thorough operation of Mr. Van Hosen's Press, are prepared to say that it surpasses anything of the kind which we have heard or seen. We believe that we do not more favor the inventor than the purchaser, when we recommend it to every Farmer or Grazier in the country. William Salisbury, J. A. Cooke, Leeds; Henry Bronk, New Baltimore; Olney F. Wright, Barant Houghtaling, M. Hubbell, Cossackie.

Applications may be made to W. S. JACKS, sole agent, Catskill, New-York.

March 15, 1842.



MOTT'S PATENT AGRICULTURIST'S FURNACE AND BOILERS.

THE subscriber having rebuilt his foundry, (his former one with most of his patterns having been destroyed by fire in February,) is again prepared to execute orders for his invaluable Furnace. This article has been so well described in former numbers of this journal, and its usefulness so fully tested, a detailed description is deemed unnecessary. The experience of several who have kept an account, prove that this Furnace and Caldron cost less to get ready for use than sitting caldrons in brick work, when all expenses are included; these require only a piece of pipe. In making new patterns, the different sizes are classified by the number of gallons the Boiler contains, in lieu of the barrel as heretofore. The sizes will not vary much from, and the prices will be as follows: $\frac{1}{4}$ barrel, or 15 gallons, \$11; 1 barrel, or 30 gallons, \$18; common 14 barrel, or 40 gallons, \$21; extra 14 barrel, or 50 gallons, \$24; 2 barrels, or 60 gallons, \$26; common 3 barrels, or 90 gallons, \$35; 3 barrels, or 100 gallons, \$41; 4 barrels, or 120 gallons, \$48; 5 barrels, or 150 gallons, \$55—nine sizes.

Planters or farmers, by enclosing the amount by mail in bills of any specie paying bank, can have either of the above shipped as they may direct. All letters must be post paid. Address J. L. MOTT, 264 Water-street, New-York, or G. G. HEERMANCE, 5 Green-street, Albany.

P. S. Those who yet prefer setting in brick, can be furnished with Caldrons of either the above sizes, which may be heretofore fitted with the iron Furnace, should the brick setting be abandoned.

March, 1842.

FROM THE STEAM PRESS OF C. VAN BENTHUYSEN.